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ABSTRACT

This study examined whether the provision of AUSTUDY improved educational participation in Australian higher education and improved access for certain disadvantaged groups. It also examined corporate knowledge about AUSTUDY, the impact of the initiative on educational participation across income groups and geographic regions, and lessons learned. AUSTUDY offered financial support to students who wished to participate in postsecondary education, provided that their parents (or themselves) met certain income and asset criteria. Researchers used 11 years of AUSTUDY data as well as ABS data from the 1986-97, 1991, and 1996 censuses. The data allowed detailed study of how take-up rates for AUSTUDY changed over time by age, gender, state, region, and relative income. Results indicated that AUSTUDY lowered barriers to higher education for low-income students. Most of the growth in AUSTUDY applicants from 1987 to 1997 came from the bottom half of the eligible income range for AUSTUDY, in students whose parents had little education and few skills. The proportion of Australians between 15 and 29 years of age living in rural and remote areas who applied for AUSTUDY was significantly lower than for those living in the cities, though the rate for those living in rural areas was increasing rapidly. (Contains 22 references.) (SM)

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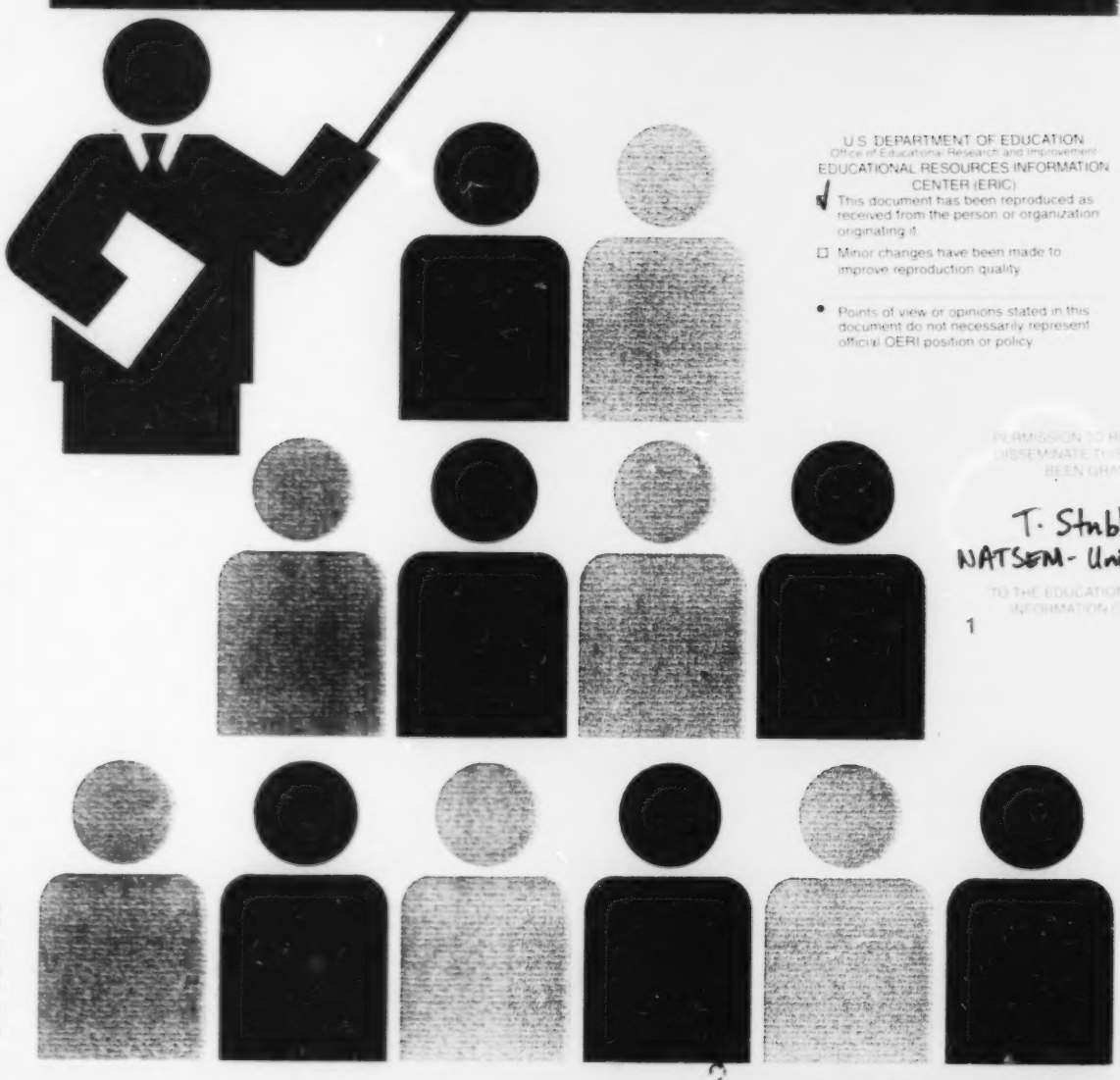

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Key words

Higher education; income support; regional analysis; educational participation

About NATSEM

The National Centre for Social and Economic Modelling was established on 1 January 1993, and supports its activities through research grants, commissioned research and longer term contracts for model maintenance and development with the federal departments of Family and Community Services, Health and Aged Care and Education, Training and Youth Affairs.

NATSEM aims to be a key contributor to social and economic policy debate and analysis by developing models of the highest quality, undertaking independent and impartial research, and supplying valued consultancy services.

Policy changes often have to be made without sufficient information about either the current environment or the consequences of change. NATSEM specialises in analysing data and producing models so that decision makers have the best possible quantitative information on which to base their decisions.

NATSEM has an international reputation as a centre of excellence for analysing microdata and constructing microsimulation models. Such data and models commence with the records of real (but unidentifiable) Australians. Analysis typically begins by looking at either the characteristics or the impact of a policy change on an individual household, building up to the bigger picture by looking at many individual cases through the use of large datasets.

It must be emphasised that NATSEM does not have views on policy: all opinions are the authors' own and are not necessarily shared by NATSEM.

Director: Ann Harding

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Author note

Agnes Walker is a Principal Research Fellow and Kwabena Osei a Research Assistant at NATSEM. At the time this research was conducted, Peter Johnson was a Research Officer at NATSEM.

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General caveat

NATSEM research findings are generally based on estimated characteristics of the population. Such estimates are usually derived from the application of microsimulation modelling techniques to microdata based on sample surveys.

These estimates may be different from the actual characteristics of the population because of sampling and nonsampling errors in the microdata and because of the assumptions underlying the modelling techniques.

The microdata do not contain any information that enables identification of the individuals or families to which they refer.

Abbreviations and explanations

Age of independence	Age at which applicants for AUSTUDY are assessed on the basis of their own (and/or spouse's) income, rather than on their parents' incomes
Dependent applicants	Those applicants for AUSTUDY who were assessed on the basis of their parents' incomes
Equivalent family income	Gross annual family cash income, accounting for differences in factors such as family size
Family	Refers to an income unit, as defined by the Australian Bureau of Statistics in its surveys
Independent applicants	Those applicants for AUSTUDY assessed on the basis of their own income (not on the basis of their parents' incomes)
Low income families	Families with income that qualified dependants for AUSTUDY in that year
Take-up rates of AUSTUDY by 15–29 year olds	Computed as the number of 15–29 year old AUSTUDY applicants divided by the total number of 15–29 year olds in the population

Overview

Background

The Commonwealth Government has traditionally provided support for the further education of Australian students. For example, the Tertiary Education Assistance Scheme (TEAS), which operated between 1974 and 1986, was replaced by AUSTUDY (1987–97). AUSTUDY was replaced in 1998 by the current scheme, Youth Allowance.

While all three schemes had the same broad goal of assisting those undertaking post-compulsory studies, during the TEAS period the financial values of the grants were increasingly reduced and assistance was restricted to students from low income families (DEET 1988, p. 17). Transitions from one scheme to the next were relatively smooth, with minor adjustments in policy settings having been frequently made both between schemes and while each scheme was operating.

An assessment of TEAS was undertaken by the Department of Employment, Education and Training (DEET 1988). The Department of Education, Training and Youth Affairs (DETYA) commissioned NATSEM to undertake this project concerning AUSTUDY.

Aims

The aims of the project were to:

- identify whether the provision of AUSTUDY improved educational participation;
- examine whether AUSTUDY improved educational access for certain disadvantaged groups;
- capture corporate knowledge about AUSTUDY;
- examine the impact of the scheme on educational participation across income groups and geographic regions; and
- extract any lessons that AUSTUDY may provide for the Youth Allowance.

The project was carried out in two stages. In stage 1 a new individual-based (or unit record) dataset was developed from administrative data files held by the Department of Education, Training and Youth Affairs for each year of AUSTUDY. Johnson, Walker and Bailey (2000) provide details of the construction, validation and some applications of the new AUSTUDY student datasets along with key findings from stage 1 of the project (see also section 3 of this report).

Stage 2 added an Australia-wide perspective to the 'AUSTUDY population characteristics' focus of the first stage. It also estimated the relative importance of the economic, social and policy-related variables influencing the 'take-up rates' of AUSTUDY. The methodologies used in carrying out the analyses are explained in section 2. This report concerns mainly stage 2 of the project.

Key findings

The findings are expressed in terms of AUSTUDY applicants. However, most of the results apply equally to AUSTUDY recipients. This is because the proportion of AUSTUDY applicants who were successful in receiving AUSTUDY support was not only high (close to 90 per cent), but also stable over the study period 1987–97.

AUSTUDY student characteristics

- The number of AUSTUDY applicants (and recipients) increased by over 100 per cent (that is, more than doubled) over the period, when the number of Australian students aged 15 years or over increased by less than 50 per cent (subsection 4.1).
- Secondary students made up the largest proportion of all AUSTUDY applicants (40–50 per cent) and university students the next largest (42 per cent in 1987, declining to 34 per cent by 1997). Although TAFE applicants accounted for a relatively low share of all applicants (12 per cent in 1987 and 19 per cent by 1997), their number showed the most rapid growth, increasing more than threefold over the AUSTUDY period (subsection 3.1).
- The number of 'mature age' applicants (aged 30 years or more) grew very rapidly over the period although from a small base of 12 000 to 64 000 (subsection 3.1).
- Information on applicants' family assets, with the AUSTUDY asset test coming into effect only in 1990, suggests that some 30 per cent of applicants had no assets, and around 70–75 per cent had assets of less than $50 000 (in 1997 dollars). Because the asset test applied for only the latter part of the AUSTUDY period, it was not taken into consideration in the stage 2 analyses.
- The proportion of applicants with family incomes below $20 000 a year (in 1997 dollars) appears to have increased from 60 per cent of all applicants in 1987 to 80 per cent in 1997. Information on parents' occupations suggests that, between 1987 and 1997, more and more applicants were from the most disadvantaged families, having parents with little education and with few skills. However, these results must be treated with caution because the DETYA unit record data on incomes was not sufficiently accurate for such analytical purposes.

The propensity of Australians to apply for AUSTUDY

- The proportion of 'student-age' (15–29 year old) Australians who applied for AUSTUDY increased over the period 1987–97 even though the eligibility criteria were tightened.
- The proportion of 15–29 year olds who applied for AUSTUDY (the take-up rate) doubled over the period (from 6 to 12 per cent), while there was nearly a fourfold increase (from 0.16 to 0.62 per cent) in the proportion of people aged 30 years or over who applied. This latter finding suggests a rapid increase in the demand for 'lifelong learning' (subsection 4.2).

Trends by gender

- In all years slightly more women than men applied for AUSTUDY and this gap increased over time. While at the beginning of the AUSTUDY period there were 12 per cent more female applicants than male applicants, by the end of the period this difference had risen to 19 per cent (subsection 4.3).
- Similar patterns were observed for the group aged 30 or more. The proportion of such men who applied for AUSTUDY increased from 0.12 to 0.49 per cent, when the proportion of that age group of women increased from 0.2 to 0.74 per cent (subsection 4.3).
- Throughout the study period the ratio of male AUSTUDY applicants that had capital city home addresses to all male AUSTUDY applicants was consistently higher than the national average, and the corresponding proportion of female applicants was consistently lower. This pattern was reversed for applicants from non-capital cities and from rural or remote areas (subsection 4.3).

Trends by geographic area of home residence

- In general the take-up rate was higher for people living in cities than in rural or remote areas. However, that rate increased significantly more rapidly in rural areas over the AUSTUDY period (subsection 4.2).
- Australia-wide, the take-up rate of 15–29 year olds with city home addresses increased from close to 7 per cent to around 13 per cent over the period, compared with a rise from around 4 to 9 per cent for applicants from the 'bush'. In general the take-up rate was lower in capital cities than in other urban areas. However, there were significant variations across States for both the city and the bush shares (subsection 4.2, table 2). Appendix D maps the 1996 take-up rates by postcode on a State-by-State basis.
- While for city dwellers the proportion of 15–29 year olds applying for AUSTUDY nearly doubled over the period, for people from the bush it increased more

rapidly (by a factor of 2.3). This indicates that the rural or remote areas were 'catching up' with the cities (subsection 4.2, figure 11).

Effects of changes in the settings of AUSTUDY

Family income threshold

- Although the AUSTUDY 'parental income threshold' was regularly altered between 1987 and 1997, in relative terms the accessibility of AUSTUDY remained at a similar level throughout the study period. This was because the changes in the income threshold broadly followed movements in the income levels of the total population. As a result the proportion of Australians eligible for AUSTUDY (based on the parental income threshold) was around 35 per cent at both the beginning and the end of the period, although it dropped to 30 per cent in 1991 (see subsection 4.4, table 4). Overall, the parental income threshold changed in such a way that most Australians in the lowest two gross family income quintiles qualified for AUSTUDY throughout the period.

Age of independence

- There were significant changes to the 'age of independence' over the period — from 25 down to 22 years by 1996, and then back to 25 years (table 5). The lower the age of independence, the more students from 'better off' families were expected to become eligible for AUSTUDY. This was because the 'age of independence' rule gave children of 'better off' Australians access to AUSTUDY as soon as they reached the administratively set age for independence (that is, when they were able to apply under the 'single' category). Our findings support this expectation — albeit indirectly — in that in the latter part of the period, when the age of independence was gradually lowered, the number of 'single' applicants increased considerably. At the same time the number of 'dependent' applicants (that is, those assessed on the basis of their parents' incomes) declined (subsection 3.3, figure 8).

Student allowances

- Student allowance rates were gradually increased over the study period in 'current dollar' terms (appendix C). However, when expressed as a proportion of Australians' average weekly earnings, the allowance rates changed only marginally — from 10.0 per cent in 1987 to 12.7 per cent by 1994 and 12.3 per cent in 1997 (subsection 1.1). This suggests that AUSTUDY's aim of paying students 'an allowance which would help maintain them while studying' had been achieved.

Key factors contributing to the rapid rise in AUSTUDY students

- In general during the period there was a strong upward trend in the proportion of all 15–29 year old Australians undertaking post-compulsory studies. However, this trend was much stronger for AUSTUDY students – an increase of 100 per cent in the take-up rate compared with 50 per cent for other students (subsection 4.1). Studies based on longitudinal data suggest that this 'trend' effect was due in great part to a shift in the educational aspirations of young people from low socioeconomic backgrounds (subsection 6.3).
- Other factors influencing this trend were either of an economic nature (changes in GDP growth and unemployment rates) or policy driven (changes to the settings of AUSTUDY) (sections 4.4, 5 and 6.1).
- Using multiple regression techniques, we studied the relative importance of the above factors in influencing the doubling of the AUSTUDY take-up rate, and found that a trend factor was the single most important explanatory variable. The settings of the AUSTUDY parental income threshold and GDP were also significant (subsection 6.2). Earlier research reviewed (subsection 6.3) suggested that, apart from the above-mentioned changes in educational aspirations, key reasons may have included the rapid rises in unemployment rates early in the period (especially for people without educational qualifications), and the opportunities presented for further study by the easier transition to TAFE courses (made possible by greater school–TAFE cooperation). Previous studies also drew attention to the declining importance of 'financial difficulties' as a reason for not undertaking further studies (subsection 6.3).
- Overall, it seems that the very rapid increases in AUSTUDY take-up rates were associated with a few key underlying social and economic factors, with adjustments to the settings of AUSTUDY playing only a 'facilitating' role.

Comments on possible lessons for the Youth Allowance are in sections 7 and 8.

1 Introduction

1.1 Background

In Australia the Commonwealth Government has traditionally provided support for the further education of students. Between 1974 and 1986 there was the Tertiary Education Assistance Scheme (TEAS). The Department of Employment, Education and Training (DEET 1988, pp. 16–18) reported that in that period there had been dramatic changes in the forms of student assistance available. For example, teacher scholarships virtually disappeared, means testing reduced the proportion of tertiary students receiving assistance to 40 per cent, opportunities for mature-age students expanded considerably (due partly to the possibility of part-time enrolments) and the opening up of full-time TAFE study helped an increasing number of students from low income families. Assistance under TEAS gradually became only a supplement to whatever other sources of income the students had.

Many of the elements of AUSTUDY had their origins in TEAS. At the time of its introduction in 1987, allowances under AUSTUDY were to be improved and eventually aligned with the unemployment benefit for those aged under 21 years. The expectation was that the scheme would provide a much stronger incentive for young people to study, thus improving their chances of finding a job. At that time the aims of AUSTUDY were:

- to pay eligible students an allowance that would help maintain them while studying;
- to lower barriers to educational participation for students from lower socioeconomic backgrounds (DEET 1988, p. 18); and
- '... to promote equality of educational opportunity by improving access to, participation and retention in and completion of education through the provision of financial assistance to Indigenous students and students who are financially disadvantaged, geographically isolated and disabled' (DEETYA 1998, p. 129).

On 1 July 1997 Centrelink, the agency that delivers many Commonwealth payments, assumed responsibility for student assistance as well. On 1 July 1998 the Youth Allowance replaced AUSTUDY for most students.[1]

Broadly, AUSTUDY offered financial support to those who wished to study beyond the compulsory education stage, provided that their parents (or themselves) met certain income and asset criteria. For a summary of the way the AUSTUDY policy settings changed over time see appendix C (for greater detail, see Johnson, Walker

and Bailey 2000, section 4). AUSTUDY thus covered the last two years of secondary education (that is, years 11 and 12)[2] as well as tertiary courses at TAFE (Technical and Further Education) institutions and universities.

Three AUSTUDY policy settings are analysed in this report: the parental income thresholds, the age of independence and student allowances. However, a priori, student allowances are not expected to have affected participation rates significantly. This is because the amount students were paid – that is, the allowance rates given in appendix C – broadly kept pace with increases in average weekly earnings.[3] This suggests that the living standards of the majority of AUSTUDY students changed little over the period 1987–97 relative to those of Australians generally.

1.2 Project description

The aims of the project were to:

- identify whether the provision of AUSTUDY improved educational participation;
- examine whether AUSTUDY improved educational outcomes for certain disadvantaged groups;
- capture corporate knowledge about AUSTUDY (see Johnson, Walker and Bailey 2000);
- examine the impact of AUSTUDY on educational participation across income groups and geographic regions; and
- extract any lessons that AUSTUDY may provide for the Youth Allowance.

Although this report covers some aspects of the research carried out under stage 1 of the project (see Johnson, Walker and Bailey 2000) it mainly concerns the second stage of the project. Broadly, stage 1 focused on compiling the base dataset and studying the characteristics of AUSTUDY students; stage 2 aimed to place the AUSTUDY population into an Australia-wide perspective.

In stage 1 a new individual-based (or unit record) dataset was developed from administrative data files held by the Department of Education, Training and Youth Affairs (DETYA) for each year of the AUSTUDY period. One advantage of the new dataset was that its coverage of demographic and socioeconomic variables was

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2 Note that years 11 and 12 can also be completed at TAFE institutions.

3 Using the 'full-time adult ordinary time earnings' for the AWE (average weekly earnings) statistic, AUSTUDY allowances for dependent students aged 18 year old or over and living at home amounted to 10.0 per cent of AWE in 1987, 12.46 per cent in 1990, 12.68 per

considerably greater than that of the data routinely used for administrative purposes. One consequence of this was that a much broader range of analyses could be attempted. Another advantage was the comparability of the new dataset with a range of population-wide statistics — for example, those routinely collected by the Australian Bureau of Statistics (ABS). The variables contained in the new dataset are listed in appendix E.

In stage 2 we added an Australia-wide perspective to the stage 1 analyses, in part by assessing changes in the take-up rates of AUSTUDY. This involved computing the proportion of Australia's post-compulsory student-age population (15–29 year olds) that applied for AUSTUDY in any year.[4] We also looked at the variability of such take-up rates by age (including mature-age students), gender and geographic location of home residence. As a third step we assessed the relative importance of key economic, social and policy variables that influenced the take-up rate of AUSTUDY. The policy variables considered were the parental income threshold, the age of independence and the allowance settings for AUSTUDY as they changed over the period 1987–97.

[4] Take-up rates were computed as the number of 15–29 year olds applying for AUSTUDY

2 Methodology

The methodology for stage 2 initially involved preparing Australia-wide data in a form comparable with the key tabulations extracted during stage 1 from the AUSTUDY unit record datasets. The sources for the nationwide data were the 1986, 1991 and 1996 censuses (CDATA), collected by the ABS. This information was amended by NATSEM to link census collectors districts (CCDs) and make variables comparable over time (for example, to align variable definitions over time). In addition, incomes were estimated for each region by NATSEM, using the income ranges in CDATA and the average incomes of those income ranges shown in ABS income surveys.[5]

The years for which the above data are available cover the AUSTUDY period quite well, the 1986 and 1996 censuses providing 'beginning-to-end-period' comparisons, and the 1991 census a 'mid-period' comparison.

The methodology then involved adding a regional dimension to both the AUSTUDY and nationwide populations (see appendix A). The regional disaggregation matches the standard ABS groupings by State, and within each State the 'metropolitan', 'other urban' and 'rural' categories. The 'metropolitan' category refers to 'statistical division 5' in each State (for example, greater Sydney and greater Melbourne); 'rural' refers to localities with fewer than 999 persons; and 'other urban' comprises the difference between the previous two categories.[6] Thus the 'other urban' category is broad, comprising large non-metropolitan towns (for example, Wollongong) as well as small ones (for example, Dubbo).

In the rest of the report the ABS 'metropolitan', 'rural' and 'other urban' categories are referred to as 'capital city', 'rural/remote' and 'other city' respectively.

To add a variable indicating which region each AUSTUDY applicant belonged to, we used the postcode information available on the DETYA unit record files. The AUSTUDY files could then be aggregated to the same regional levels as the nationwide data. The postcode of the 'home address' recorded for AUSTUDY applicants was used, as it was a better indicator of whether the student had an urban or rural background than their 'term address'.

Next we aggregated the census data (as adjusted by NATSEM), so that all nationwide cross-tabulations had the same regional dimension (that is 'capital city', 'other city' and 'rural/remote') across the variables studied (that is, gender and

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5 For each of the census years, the analyses were based on the population on the census night.

various age groups by State and income Australia-wide). This resulted in over 200 cross-tabulations for 1986, 1991 and 1996 that could be compared with matching tabulations for AUSTUDY applicants in the same three years.

Because such comparisons generally concerned the take-up rate of AUSTUDY among the eligible 'target' population (mainly 15–29 year olds), we used statistics on AUSTUDY applicants rather than on recipients. However, because non-eligible candidates tended not to apply, the number of recipients was remarkably close to the number of applicants (close to 90 per cent in all years except 1990 and 1997 when the proportion was 85 per cent).

As noted earlier the take-up rate was computed as the share of AUSTUDY applicants in the total population of 15–29 year olds within the region under consideration. For 1996, such shares were also computed at the postcode level, and then mapped for each State and its capital city (appendix D).

3 Key findings from stage 1

In this section key stage 1 cross-tabulations are reproduced from Johnson, Walker and Bailey (2000), and reasons for their importance to stage 2 are explained. As mentioned in section 2, stage 1 findings are reproduced in this report within the context of the AUSTUDY applicant population. However, as noted in section 2 the findings for AUSTUDY recipients were very similar.

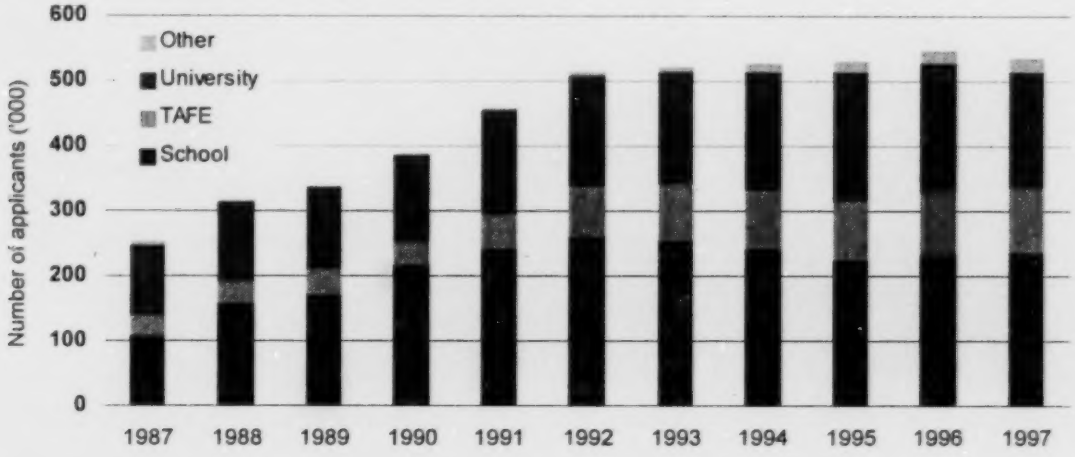
3.1 Trends in the AUSTUDY applicant population

Numbers of applicants

Important patterns during the study period were the very rapid increases in the number of AUSTUDY applicants between 1987 and 1992, and the subsequent 'flattening' of their numbers between 1992 and 1997 (figure 1).

The rapid rise in the number of applicants in the early part of the period was driven mainly by considerable increases in applicants at post-compulsory school levels, although numbers for TAFE and university places also rose. In the latter part of the period the number of 'secondary' applicants declined, but this was just about offset by increases in the number of tertiary students. The reasons underlying these patterns are investigated further in section 4.

Figure 1 **Applicants for AUSTUDY by type of educational institution**



Note: 94 per cent of TAFE applicants are recorded as being in the tertiary sector in 1997.
Source: Compiled from DETYA unit record data.

cent). Although TAFE applicants accounted for a relatively small proportion of all applicants (about 10–20 per cent), over the period 1987–97 their numbers showed the most rapid growth — more than a threefold increase.

Applicants by age group

One issue investigated in stage 2 was the extent to which the trends in the numbers of applicants in figure 1 reflected shifts in demographic patterns. To address this we first needed to establish the age band within which most AUSTUDY applicants fell. Around 90 per cent of applicants were aged between 15 and 29 years (figure 2). On that basis, stage 2 of this project concerns mainly 15–29 year old Australians over the period 1987–97. However, because of the very rapid increase in applicants aged 30 years or more, we included some analyses for this older age group (subsections 4.2 and 4.3). The dramatic increases in their numbers indicate a rapid growth in the demand for lifelong learning by older Australians.

The student-age population — 15–29 year olds — was broken down into 15–17, 18–24 and 25–29 year olds. Broadly, the 15–17 year age group corresponds to secondary students (years 11 and 12) and the 18–24 age group to tertiary students studying for their first degree. Many in the 25–29 age group may have been studying for degrees requiring more than the standard three years, or may have returned to studies after a break. The numbers of 15–17 year olds and 18–24 year olds increased significantly over the period 1987–92. Then the number in the younger group declined slightly, while the number in the older group continued to increase (figure 2). In particular, the number of mature-age applicants — that is, people aged 30 years or over —

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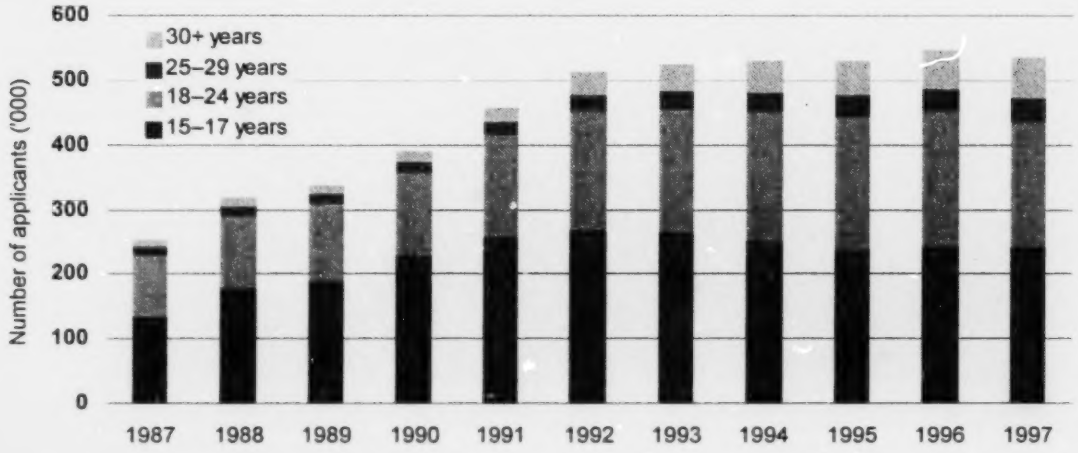
Figure 2 **Applicants for AUSTUDY by age group**



Source: Compiled from DETYA unit record data.

increased dramatically over the whole period (with only around 12 000 applicants for AUSTUDY in 1987, rising to around 64 000 by 1997).

A key question concerns the demand for AUSTUDY places among all Australians aged 15–29 years. Before being able to address this question, however, there is a need to study Australia's student-age population, so that it can eventually be compared with the AUSTUDY applicant population.

3.2 Trends in Australia's student-age population

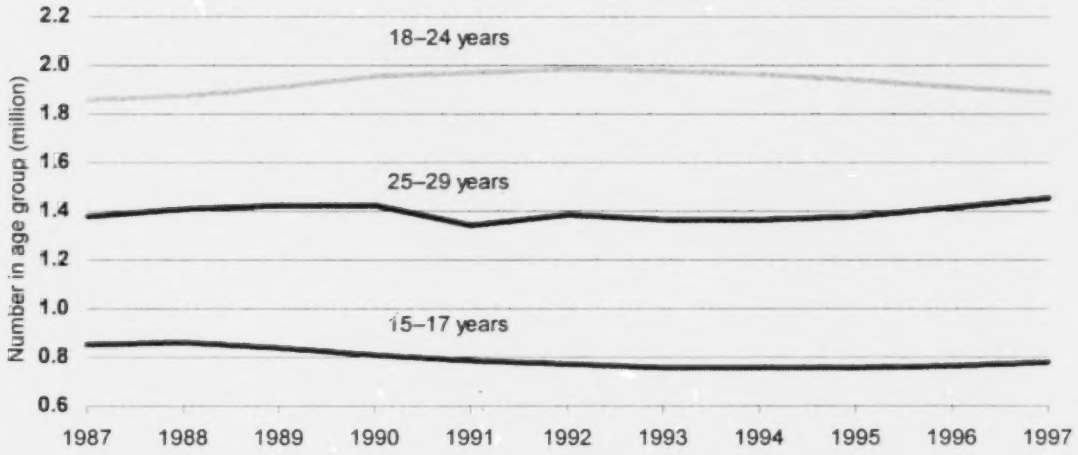
Within the 15–29 year old population in Australia, the 18–24 year old group was the largest (close to 2 million persons). The total number in that group increased by 6.5 per cent between 1987 and 1993 (from 1.86 to 1.98 million), before declining to close to their late 1980s levels by 1997 (figure 3). When the 18–24 year group was divided into two groups (18–21 and 22–24 year olds) it was found that the number of 18–21 year olds grew quite substantially (by 11 per cent) between 1987 and 1992. The 25–29 year old group was the next largest, fluctuating around 1.4 million over the whole study period. The population of 15–17 year olds was the smallest. The total number in that group declined by 12 per cent between 1987 and 1994 (from 0.85 to 0.75 million), before increasing slightly over the next few years.

The total number of 15–29 year olds remained at a similar level throughout the period 1987–97 (figure 4). This group increased from 4.1 million in 1987 to just under 4.2 million by 1990; the number fell to 4.1 million in 1991 and then fluctuated around that level. As will be seen later, the effect of this stability in the total number of 15–29 year old Australians was that the doubling in AUSTUDY applicants (figure 1) meant

a doubling of the proportion of all 15–29 year olds in Australia applying for AUSTUDY.

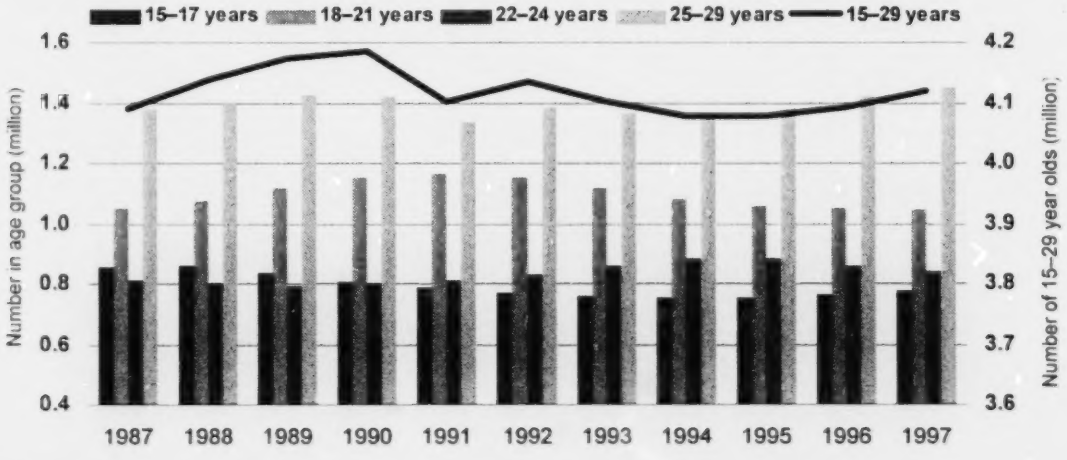
Although the total number of 15–29 year olds changed very little over the study period, Johnson, Walker and Bailey (2000, figure 5) found that the number of people studying at the post-compulsory level increased considerably over the period — from around 1.7 to 2.5 million (46 per cent). This suggests a significant increase in the demand for post-compulsory courses generally. The question is whether the demand for AUSTUDY places showed a corresponding increase.

Figure 3 **Numbers of 15–17, 18–24 and 25–29 year olds in Australia**



Data source: ABS, *Australian Demographic Statistics*, Cat. no. 3101.0, Canberra, various issues.

Figure 4 **Total number of 15–29 year olds in Australia by age group**



Data source: ABS, *Australian Demographic Statistics*, Cat. no. 3101.0, Canberra, various issues.

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3.3 Characteristics of AUSTUDY applicants

By age group

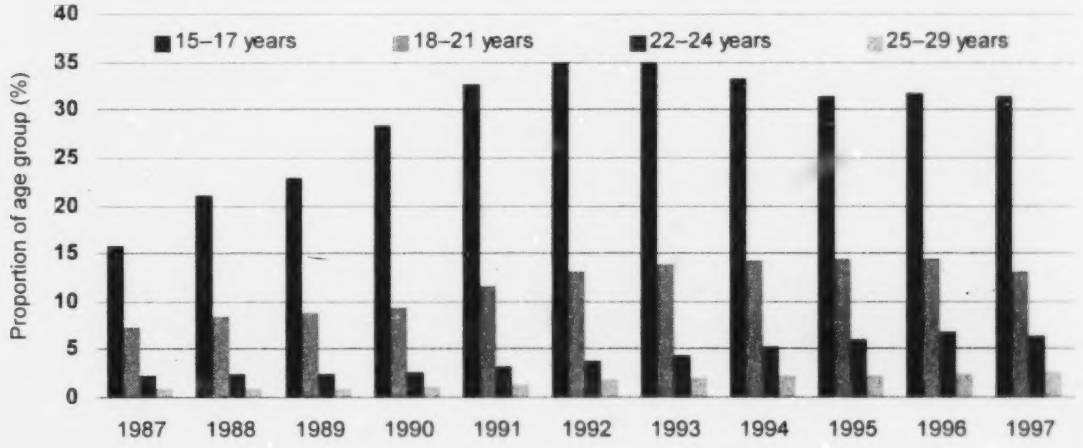
As noted in subsection 3.1, it is the trend in the demand for AUSTUDY places among young Australians within particular age groups that is of interest, rather than changes in the numbers of applicants per se. In this study the indicator we used to assess this demand was the take-up rate, computed as the number of AUSTUDY applicants within a defined group divided by the total population in that group.

The proportion of AUSTUDY applicants in the population of 15–29 year olds increased rapidly until 1992 before levelling off (figure 5). This pattern was driven by the trends for 15–17 and 18–21 year olds.

Because 22–24 and 25–29 year old applicants account for relatively small proportions of their age group populations, these subgroups had little impact. However, the general upward trends in their proportions served to offset the declining trend for 15–17 year olds in the latter part of the study period.

The issue of the trends in the demand or take-up rate of AUSTUDY for post-compulsory education is examined further in subsection 4.1.

Figure 5 **AUSTUDY applicants as a proportion of all Australians in age groups**



Note: AUSTUDY applicants as a proportion of all Australians over the age of 30, rose from 0.1 per cent in 1987 to 0.6 per cent in 1997.

Data source: Compiled from DETYA unit record data, and ABS, *Australian Demographic Statistics*, Cat. no. 3101.0, Canberra, various issues.

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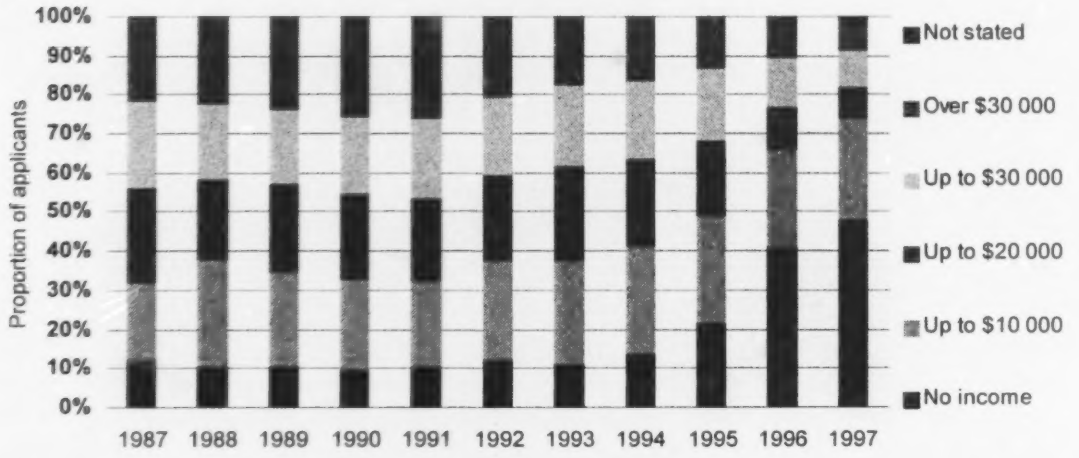
By family income and parents' occupations

The parental income threshold is one of the key policy settings of AUSTUDY (appendix C). Although family income data in the AUSTUDY dataset were found to have significant limitations, the statistics extracted from this source suggest that the fastest growing group of AUSTUDY applicants *may* have had the lowest family incomes — up to $10 000 a year in 1997 dollar terms (figure 6) (see Johnson, Walker and Bailey 2000).

Figure 6 **Distribution of AUSTUDY applicants by family income**[a] In 1997 values[b]



[a] If a student was married or a dependant, family income comprises both student and family income. If a student was single, family income comprises the student income only. [b] Income has been converted to 1997 dollar values using the consumer price index (all groups, weighted average of eight capital cities) (see ABS website at gopher://gopher.abs.gov.au).

Source: Compiled from DETYA unit record data.

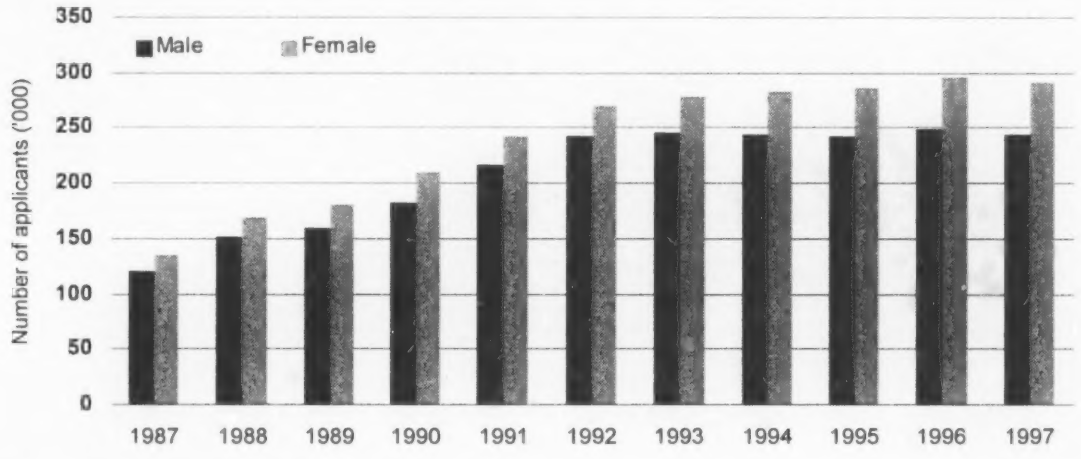
Figure 6 suggests that the proportion of AUSTUDY applicants with family incomes below $20 000 a year (in 1997 dollars) was close to 60 per cent of all applicants in 1987 and just over 80 per cent in 1997. In section 4 we will investigate this issue further, and compare the way AUSTUDY family income patterns changed with the income patterns of the total Australian population.

Although not graphed here, Johnson, Walker and Bailey (2000) concluded that information on parents' occupations in the DETYA dataset suggested that, between 1987 and 1997, more and more AUSTUDY applicants may have originated from the most disadvantaged families, having parents with little education and few skills. Although the occupation classes in the DETYA dataset are very broad and sometimes indirect, a recent study strongly supported these findings (see Long, Carpenter and Hayden 1999). Further details are in subsection 6.3.

By gender

Throughout the study period, there were slightly more female AUSTUDY applicants than male applicants and a more pronounced increase in the number of female applicants than in the number of male applicants (figure 7). At the beginning of the period there were 12 per cent more female applicants than male applicants; by the end of the period this difference had risen to 19 per cent. Around 156 000 more females applied for AUSTUDY in 1997 than in 1987; the corresponding number for males was 125 000.

Figure 7 **Applicants for AUSTUDY by gender**



Source: Compiled from DETYA unit record data.

Whether dependent

The 'age of independence 'AUSTUDY policy setting determines the age below which applicants are considered 'dependent' — that is, they are assessed on the basis of their parents' incomes. Above that age applicants are considered to be independent and are assessed on the basis of their own (and/or spouse's) income. Settings for the age of independence are examined further in section 5. The related changes over time are detailed in appendix C.

Over the study period the majority of AUSTUDY applicants had a 'dependent' status — well over two-thirds of all applicants in most years (figure 8). Johnson, Walker and Bailey (2000) found that the majority of dependent applicants came from two-parent families. However, a high proportion also came from sole parent families, increasing from 27 per cent in 1987 to 34 per cent by 1997.

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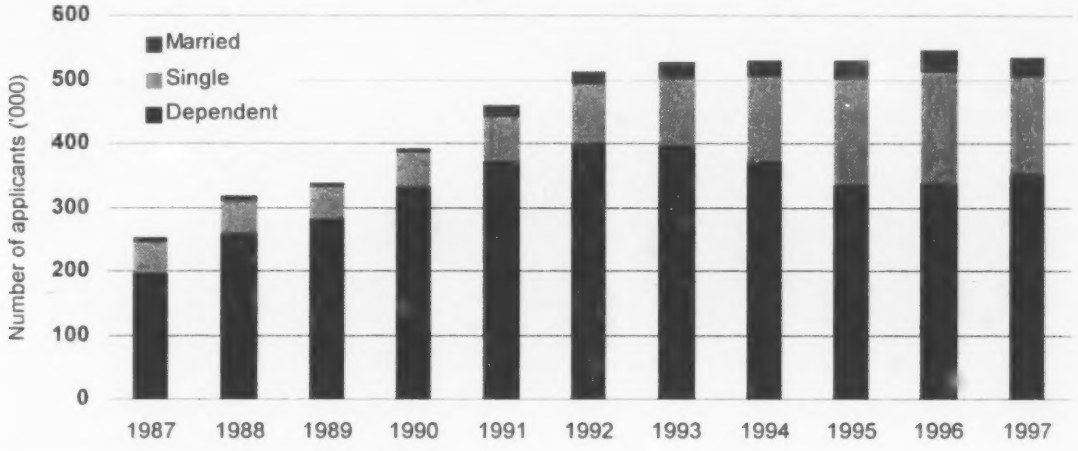
Independent applicants were persons over the 'age of independence' as set for the relevant year. The majority of the 'independents' were single; only around 5 per cent were 'married' (figure 8). Responding to the gradual lowering of the 'age of independence' between 1987 and 1996 from 25 to 22 years, the proportion of single applicants increased rapidly – from 18 per cent in 1987 to 32 per cent in 1996. It then declined to 29 per cent in 1997, reflecting the lifting of the age of independence back to 25 years in that year.

Figure 8 **Applicants for AUSTUDY by family relationship**



Source: Compiled from DETYA unit record data.

4 Results of stage 2

Two important questions were examined in stage 2 of the project.

- What proportions of Australian men and women in the 15–29 year and 30 years or over age groups – living in different States and regions – chose to undertake post-compulsory studies?
- How have these proportions changed over time?

In this section the populations of AUSTUDY – and in some cases non-AUSTUDY – students in various age groups are compared with the total Australian population in the same age groups. The key age group of 15–29 year olds was chosen for analysis so as to facilitate regional comparisons for the years 1986, 1991 and 1996 (subsection 4.2). Since there was a very rapid increase over the period in the proportion of AUSTUDY students aged 30 or more (figure 2), this older age group was also analysed further.

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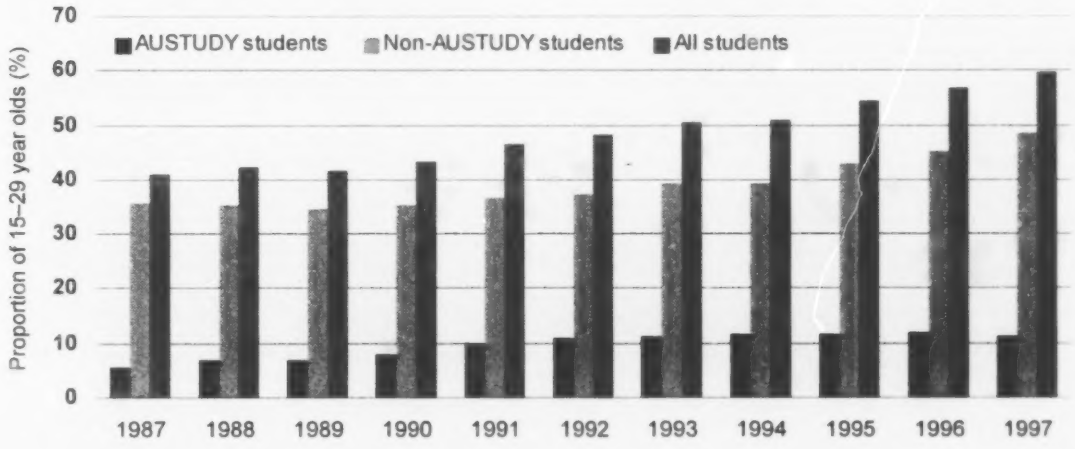
4.1 Demographic trends and proportion of students

Unlike in other parts of this report, in this subsection it is students – not AUSTUDY applicants – that are considered. This is because statistics for applicants within the non-subsidised segment of the student population – that is, non-AUSTUDY persons – are not readily available.

The proportion of Australia's 15–29 year old population undertaking studies beyond 'compulsory schooling' increased from 41 per cent in 1987 to 60 per cent in 1997, most of the increase occurring between 1991 and 1997 (figure 9). One reason for this may have been an increase over the period in the proportion of parents with 'post-compulsory' educational backgrounds, since it is well established that the children of such parents are more likely to undertake further studies (see Long, Carpenter and Hayden 1999, p. 18).

The 46 per cent increase in the proportion of the 'target population' undertaking post-compulsory studies suggests a strong upward trend in the rate of educational participation generally. It is interesting to note that this upward trend occurred despite the reintroduction of user-pays principles in 1989 through the Higher Education Contribution Scheme (HECS). Indeed, the upward trend is much more pronounced in the 'all student' proportions after 1989 than before that year (figure 9). The trend supports the conclusion of Andrews (1999, p. ix) that HECS was 'a very

Figure 9 **Proportions of AUSTUDY and other students in the Australian population of 15–29 year olds**



Data sources: ABS, *Australian Demographic Statistics*, Cat. no. 3101.0, for total population numbers; Australian Tertiary Education Commission, *Selected TAFE Statistics*; National Centre for Vocation Education Research, *Selected Vocational Education Statistics*; Commonwealth Tertiary Education Commission, *Selected Higher Education Statistics* for total student numbers; unit record AUSTUDY data provided by DETYA for numbers of AUSTUDY students.

minor influence, if a factor at all, for the low participation by low SES [socioeconomic] groups'.

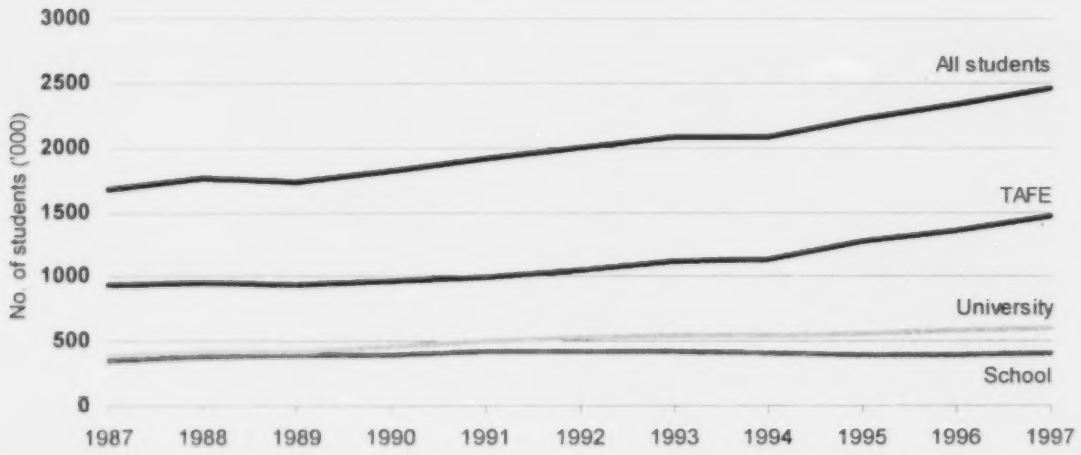
Students not receiving AUSTUDY dominated, accounting for 36 per cent of all 15–29 year olds in 1987 and 49 per cent in 1997. Most of the increase in the proportion of non-subsidised (non-AUSTUDY) students took place in the latter part of the study period.

The proportion of non-subsidised students among all students declined from 87 per cent in 1987 to about 77 per cent in 1992–94. It then increased to 81 per cent in 1997. The reason for this overall decline was the relatively rapid growth in the proportion of AUSTUDY students.

The proportion of 15–29 year olds receiving AUSTUDY grew the most rapidly over the period 1987–97, although from a small base (figure 9). It doubled from 5.5 to 11 per cent. Most of this growth occurred in the early part of the AUSTUDY period (between 1987 and 1992). An explanation is provided by Long et al. (1999, p. viii), who concluded that 'graduation from Year 12 increasingly became a near universal qualification'.

To give a feel for the numbers of students undertaking post-compulsory studies in different educational institutions, between 1987 and 1997 the majority were at TAFE (1–1.5 million), fewer than 0.5 million were at school and around 0.5 million were at university (figure 10).

Figure 10 **Number of students aged 15 years or over, by educational institution, Australia**



Data sources: Australian Tertiary Education Commission, *Selected TAFE Statistics*; National Centre for Vocation Education Research, *Selected Vocational Education Statistics*; Commonwealth Tertiary Education Commission, *Selected Higher Education Statistics*.

4.2 Regional distribution of AUSTUDY students

By State and region

The first part of this subsection concerns AUSTUDY students only. The distribution of these students is studied by State and region. This type of 'two dimensional' analysis has been often used in previous studies.

The second part of the subsection looks at the regional AUSTUDY take-up rate within the context of changes in the 'target' population (that is, the total number of 15–29 year olds). This methodology has been less frequently used. In the final part of this subsection an explanation is provided as to why the two approaches do not come up with similar findings. Overall, we draw attention to the care that needs to be taken when selecting variables for particular analyses.

All AUSTUDY students

The distribution of all AUSTUDY students by State or Territory and by the three regions 'capital city', 'other city' and 'rural/remote' (see section 2) shows that the home addresses of the majority of AUSTUDY students were in capital cities (table 1). Over the period 1987–97, students with Sydney home addresses made up between 56 and 60 per cent of all AUSTUDY students whose families lived in New South Wales. The corresponding percentages were highest for Perth students (78 and 82 per cent) but also high for Adelaide and Melbourne students (70–80 per cent). Percentages were lowest for Hobart and Brisbane students (37–48 per cent). Note that, due to a high proportion of postcodes not having been recorded by Northern Territory applicants, the regional proportions for that Territory are presented for illustrative purposes only.[7]

An important finding is that, in all States, the proportion of students with capital city home addresses remained relatively stable over the AUSTUDY period — that is, showed neither an upward nor a downward trend.

The proportions of AUSTUDY students from non-capital cities in the States were highest in Tasmania (45–50 per cent), Queensland (40–45 per cent) and New South Wales (35–40 per cent).

As expected, the proportions from rural/remote regions in the States were generally low. They were highest in Tasmania and Queensland (17 and 12 per cent respectively in 1997) and lowest in New South Wales and Western Australia (around 4 per cent in 1997). While in most States the proportions from rural/remote regions remained

Table 1 **Distribution of all AUSTUDY students by State and region**

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	%	%	%	%	%	%	%	%	%	%	%
Australian Capital Territory											
Capital city	100.0	100.0	99.6	99.4	99.5	99.5	99.1	99.5	99.1	99.2	98.9
Other city	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.5	0.4	0.4	0.5
Rural/remote	0.0	0.0	0.5	0.6	0.5	0.6	0.6	0.0	0.6	0.4	0.6
New South Wales											
Capital city	59.3	57.6	56.1	56.6	57.3	57.2	58.6	59.0	60.1	59.9	59.1
Other city	36.2	38.2	39.9	39.3	38.6	38.6	37.3	36.9	36.0	36.1	36.9
Rural/remote	4.5	4.2	4.0	4.1	4.2	4.2	4.2	4.1	4.0	4.0	4.0
Northern Territory											
Capital city	49.2	48.9	42.8	43.3	43.3	42.8	42.9	43.0	43.1	43.0	43.0
Other city	36.5	36.5	34.3	34.0	33.8	33.7	33.7	38.9	38.8	38.8	38.8
Rural/remote	14.3	14.5	22.9	22.7	22.9	23.5	23.3	18.2	18.1	18.2	18.1
Queensland											
Capital city	46.4	46.1	46.0	44.7	44.9	45.1	45.4	46.4	47.6	47.6	46.6
Other city	44.4	44.4	43.3	44.5	44.4	44.3	43.6	41.3	40.3	40.4	41.1
Rural/remote	9.2	9.5	10.7	10.8	10.7	10.6	11.0	12.4	12.2	12.0	12.4
South Australia											
Capital city	75.9	73.6	73.6	73.3	72.7	72.6	73.2	74.7	76.0	77.2	77.4
Other city	16.7	18.7	18.6	18.3	18.7	18.9	18.2	18.7	17.8	16.8	16.8
Rural/remote	7.4	7.7	7.8	8.4	8.6	8.5	8.6	6.6	6.1	6.1	5.8
Tasmania											
Capital city	42.1	39.4	38.3	38.0	37.8	36.7	37.1	37.5	38.1	38.5	37.8
Other city	47.1	49.7	47.0	47.6	47.6	48.1	46.9	45.2	44.8	44.8	45.6
Rural/remote	10.8	10.9	14.7	14.4	14.6	15.2	16.0	17.4	17.2	16.7	16.6
Victoria											
Capital city	69.7	67.5	67.2	67.4	67.7	68.1	68.8	69.8	70.4	70.6	69.9
Other city	22.9	24.9	25.8	25.5	25.1	24.6	24.0	23.5	23.1	23.0	23.7
Rural/remote	7.4	7.6	7.1	7.2	7.2	7.3	7.2	6.7	6.6	6.4	6.5
Western Australia											
Capital city	81.5	82.0	80.4	79.7	80.2	78.1	78.1	79.8	80.9	81.7	81.1
Other city	13.9	13.6	14.7	15.6	14.8	16.4	16.3	16.3	15.5	14.9	15.4
Rural/remote	4.6	4.5	4.9	4.8	5.0	5.5	5.6	3.9	3.6	3.4	3.5
Australia											
Capital city	63.5	62.0	60.9	60.9	61.4	61.4	62.1	63.0	64.0	64.2	63.4
Other city	29.9	31.5	32.4	32.4	31.7	31.7	31.0	30.2	29.4	29.3	30.0
Rural/remote	6.5	6.5	6.7	6.8	6.9	6.9	7.0	6.8	6.6	6.5	6.6

Note: Due to the lack of postcode information for a high proportion of Northern Territory AUSTUDY students, the regional shares for NT students were imputed on the basis of the regional shares of the 15–29 year old NT population. The proportions in the table may not add to 100 due to rounding.

Source: DETYA unit record files.

remarkably stable over the 1987–97 period, they increased in Tasmania and Queensland. In Tasmania the rural/remote proportion increased quite steadily from close to 11 per cent in 1987 to just over 17 per cent by 1994, before declining a little – leaving an overall upward trend. This was not the case for Launceston and Hobart, where the proportions of AUSTUDY students fluctuated around downward trends. In Queensland, the proportions of AUSTUDY students from rural/remote regions fluctuated only a little around an upward trend from 9 per cent in 1987 to 12 per cent in 1997, when the proportion from non-capital cities fluctuated around a downward trend from 44 to 41 per cent.

However, due to the steadiness of the proportions from rural/remote regions in most States, the Australia-wide proportion of AUSTUDY students from rural/remote regions remained at around 6.7 per cent throughout the study period (table 1).

AUSTUDY take-up rates among 15–29 year olds

The most striking finding about the AUSTUDY take-up rates for 15–29 year olds is that they increased dramatically in all regions over the study period (table 2). Australia-wide, the proportion of 15–29 year olds applying for AUSTUDY from capital cities was somewhat lower than the proportion from other cities. The proportion from capital cities rose from 6 per cent in 1986-87 to 12 per cent in 1996, when the proportion from other cities rose from 7 per cent to close to 14 per cent.

The demand from rural/remote areas was much lower, being 3.7 per cent at the beginning of the period and 8.7 per cent in 1996. This might be considered somewhat surprising, since the proportion of 15–29 year olds eligible to apply for AUSTUDY was likely to have been higher in rural/remote areas than in capital cities because of household incomes being some 20–25 per cent lower in rural areas (subsection 4.4). However, consideration of household incomes was beyond the scope of the above analyses. Had the differential effect in household incomes been taken into account, the differences in the demand from rural/remote areas and cities would have been even greater than evident from table 2.

Overall, our findings show that AUSTUDY applicants from rural/remote areas were considerably under-represented compared with applicants from cities. As will be seen soon, however, the extent of this under-representation declined over the study period.

The Australia-wide patterns masked a great deal of variation between States. Victoria's average take-up rate in 1986-87 was close to the national average of 6.2 per cent, but by 1996 Victoria's rate was 14.4 per cent when the Australia-wide rate was 12.4 per cent. Western Australia's rate moved in the opposite direction to Victoria's – dropping from close to the national rate to 10.7 per cent in 1996.

Table 2 **AUSTUDY take-up rates among 15–29 year olds, by State and region**

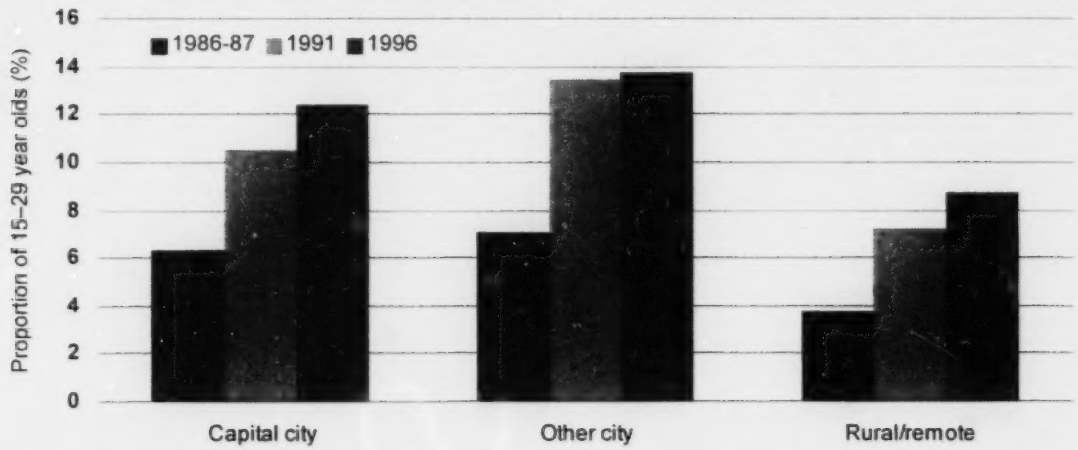
	1986-87	1991	1996
	%	%	%
Australian Capital Territory			
Capital city	5.0	9.8	11.3
Other city	0.0	0.0	0.0
Rural/remote	0.0	2.8	7.4
All regions	5.0	9.7	11.3
New South Wales			
Capital city	5.7	9.6	11.4
Other city	7.5	14.3	15.0
Rural/remote	2.9	5.2	6.5
All regions	6.0	10.6	12.0
Northern Territory			
Capital city	1.6	5.0	5.1
Other city	2.4	7.2	6.2
Rural/remote	1.3	3.3	3.3
All regions	1.9	5.3	5.1
Queensland			
Capital city	7.0	10.9	11.9
Other city	7.4	12.2	11.3
Rural/remote	3.9	7.9	10.5
All regions	6.7	11.0	11.4
South Australia			
Capital city	7.0	10.6	13.6
Other city	7.1	13.2	15.0
Rural/remote	4.5	9.4	9.7
All regions	6.7	10.9	13.5
Tasmania			
Capital city	5.9	11.4	12.6
Other city	5.9	12.9	13.5
Rural/remote	3.4	8.6	12.5
All regions	5.5	11.5	13.0
Victoria			
Capital city	6.4	11.3	13.8
Other city	7.6	16.3	18.3
Rural/remote	5.0	9.2	10.9
All regions	6.5	12.0	14.4
Western Australia			
Capital city	7.2	11.3	12.3
Other city	4.2	7.8	8.4
Rural/remote	2.5	5.1	3.9
All regions	6.0	10.0	10.7
Australia			
Capital city	6.3	10.5	12.4
Other city	7.1	13.4	13.8
Rural/remote	3.7	7.2	8.7
All regions	6.2	10.9	12.4

Note: Take up rates were measured as the number of 15–29 year old AUSTUDY applicants divided by the total number of 15–29 year olds in the population under study

The take-up rates in rural/remote areas in Queensland, Victoria and South Australia were consistently above the national average for such areas, while the corresponding rates in New South Wales and Western Australia were consistently below. In Tasmania, the initial take-up rate in rural/remote areas was close to the national average, but by 1996 it had risen to 12.5 per cent, which was well above the Australia-wide average of 8.7 per cent.

Figure 11 illustrates the dramatic regional increases over the period in the proportion of 15–29 year olds who applied for AUSTUDY. For example, in 1986-87 only some 6 per cent of capital city dwellers in that age group applied for financial help through AUSTUDY, but by 1996 the proportion had nearly doubled (an increase of 97 per cent). For other city dwellers the increase was similar (95 per cent). For those from rural/remote areas the increase was even higher (133 per cent). Although initially the AUSTUDY take-up rate in rural/remote areas was only about half the rates of city dwellers, the rural rate was 'catching up' with the city rates quite rapidly. Figure 11 shows that most of these rate increases occurred in the first part of the study period.

Figure 11 **AUSTUDY take-up rates among 15–29 year olds by region**



Note: Take-up rates were measured as the number of 15–29 year old AUSTUDY applicants divided by the total number of 15–29 year olds in the population.

Data sources: Census data grouped by NATSEM for total number of 15–29 year olds by region; DETYA unit record data for the number of 15–29 year old AUSTUDY applicants by region.

Explanation for different findings

The results in table 1 (regional distribution of the total number of AUSTUDY applicants) and in table 2 (the regional take-up rate of AUSTUDY among the total number of 15–29 year olds) highlight the importance of choosing the correct variables to answer a particular policy-relevant question. For example, if the question was about access to AUSTUDY in rural areas compared with cities, the analyses

presented in table 1. Table 1 implies that throughout the study period a relatively stable proportion of AUSTUDY applicants was from rural/remote areas (around 7 per cent). This contrasts with the table 2 results, which suggest that the proportion of 15–29 year olds in rural/remote areas applying for AUSTUDY more than doubled, from 3.7 to 8.7 per cent. The reason for the difference lies in the considerable decline (13 per cent) in the 15–29 year old population in rural areas over the period, a time when the population of 15–29 year olds in cities increased slightly (1 per cent).

Thus, while the AUSTUDY take-up rate in rural areas increased greatly, it did so from a rapidly declining population base. Moreover, this occurred when the city population base remained virtually unchanged.

AUSTUDY take-up rates among 30 or more year olds

As was seen in subsection 3.1, the number of AUSTUDY applicants aged 30 years or more grew rapidly over the study period, indicating the growing popularity of life-long learning. Australia-wide, the proportion of the total population of 30 or more year olds who applied for AUSTUDY increased nearly fourfold from 0.16 to 0.62 per cent (table 3). Despite this very rapid growth, the 'demand' for post-compulsory studies among this group remained very low compared with the 12.4 per cent take-up rate among 15–29 year olds in 1996 (table 2).

Thus, although lifelong learning is becoming more important, the bulk of post-compulsory study during the AUSTUDY period was being undertaken by younger people (the 'traditional' 15–29 years age group).

Across the States, the AUSTUDY take-up rates by 30 or more year olds in New South Wales, Queensland and Tasmania were close to the national average over the study period, but well above it in South Australia and Western Australia. Victoria was the outlier, the rate there being considerably below the national average.

For Australia as a whole, the proportion of 30 or more year olds from rural/remote areas applying for AUSTUDY was well below the average for all regions. While this mirrors the findings for 15–29 year olds (table 2), the gap was much greater for the 30 or more years age group. The ratio of rural-to-nationwide rates ranging from 31 to 42 per cent for the 30 or more years age group, when the range for the 15–29 year age group was from 60 to 70 per cent.

Tasmania is the State that stands out in terms of the take-up rate in rural/remote areas by 30 or more year olds — nearly twice the national average over the study period. In South Australia the rate tended to be similar to the national average, while in Queensland the rate was above that average by the end of the study period. The corresponding rates in New South Wales, Western Australia and Victoria were below the national average.

Table 3 **AUSTUDY take-up rates among 30 or more year olds, by State and region**

	1986-87	1991	1996
	%	%	%
Australian Capital Territory			
Capital city	0.23	0.36	0.62
Other city	0.00	0.00	0.00
Rural/remote	0.00	0.35	0.65
All regions	0.23	0.36	0.62
New South Wales			
Capital city	0.15	0.22	0.57
Other city	0.17	0.27	0.78
Rural/remote	0.03	0.06	0.18
All regions	0.14	0.22	0.60
Northern Territory			
Capital city	1.10	2.89	2.65
Other city	1.80	4.42	3.21
Rural/remote	0.39	1.91	1.90
All regions	1.21	3.11	2.73
Queensland			
Capital city	0.22	0.30	0.69
Other city	0.12	0.24	0.53
Rural/remote	0.04	0.10	0.31
All regions	0.15	0.24	0.56
South Australia			
Capital city	0.28	0.39	0.94
Other city	0.09	0.23	0.64
Rural/remote	0.08	0.16	0.24
All regions	0.22	0.33	0.81
Tasmania			
Capital city	0.23	0.33	0.66
Other city	0.19	0.38	0.78
Rural/remote	0.13	0.21	0.45
All regions	0.19	0.33	0.66
Victoria			
Capital city	0.13	0.21	0.51
Other city	0.09	0.20	0.56
Rural/remote	0.05	0.09	0.22
All regions	0.11	0.19	0.49
Western Australia			
Capital city	0.32	0.46	0.92
Other city	0.10	0.20	0.57
Rural/remote	0.04	0.07	0.13
All regions	0.24	0.37	0.76
Australia			
Capital city	0.19	0.29	0.66
Other city	0.15	0.29	0.68
Rural/remote	0.05	0.13	0.26
All regions	0.16	0.27	0.62

Note: Take up rates were measured as the number of 30 or more year old AUSTUDY applicants divided by the total number of 30 or more year olds in the population under study

By State and postcode

Another way of presenting the proportions of AUSTUDY applicants in the student-age population is by postcode. This has been done using maps in appendix D for States and their capital cities for 1996. The proportions can be thought of as representing the take-up rates of AUSTUDY assistance within each postcode, remembering, however, that these rates depended only partly on the 'demand' for AUSTUDY places. The other important variable influencing the take-up rate was the family incomes of the postcode population — a lower proportion of applicants qualify for AUSTUDY in a rich area than in a poor one.

When examining the maps in appendix D it is worth noting that they do not give any indication of population density. Thus a huge geographical area on the map indicating a high demand may concern only a small number AUSTUDY applicants, because it is sparsely populated. On the other hand, a small geographic area with a high population density may represent many AUSTUDY students. Therefore, the reader will need to have some feel for the population densities across Australia to help them interpret the information summarised in the maps.

Appendix D does not include maps of the Territories, mainly because the AUSTUDY applicant postcode data were deficient for the Northern Territory (subsection 4.2). But the map for the ACT (figure 12) is included here to illustrate how the appendix D maps can be interpreted.

Figure 12 **Proportion of AUSTUDY applicants among 15–29 year olds in the Australian Capital Territory, by postcode, 1996**

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Figure 12 shows that, in most ACT suburbs, between 10 and 20 per cent of 15–29 year olds applied for AUSTUDY in 1996. Over 20 per cent applied in the lower socio-economic postcodes in the inner city and Gungahlin, and less than 10 per cent applied in richer suburbs, such as Braddon and Yarralumla. The NSW town of Queanbeyan, which is to the far right of figure 12, also had over 20 per cent applying, since many lower income families working in Canberra reside in Queanbeyan. Basically, figure 12 illustrates the effectiveness that the AUSTUDY parental income and asset tests had in targeting the more disadvantaged groups for educational subsidies.

4.3 Trends by gender

As noted in subsection 3.3, there were more applications for AUSTUDY from females than from males and this gap increased over time. Appendix B presents separate tables for males and females that are similar to tables 1– 3 presented earlier for the population as a whole.

The appendix B tables show strong similarities between the male and female patterns. Nevertheless there were some differences when comparing the gender averages to the national averages.

Throughout the study period the proportion of male AUSTUDY applicants with capital city home addresses among all male AUSTUDY applicants was consistently a little above than the national average, and the corresponding proportion of female applicants consistently just below. This pattern was reversed for applicants from other cities and from rural/remote areas (tables 1, B1 and B2).

Overall in Australia the demand for AUSTUDY places from males was slightly lower than the national average, and it was the opposite for females. In 1996 these deviations from the national average amounted to 1 percentage point lower for men and 1 percentage point higher for women than the 12.4 per cent national average. This small difference represents just under 20 000 applicants, which is not insignificant considering that in 1996 there were around 250 000 male and 300 000 female AUSTUDY applicants.

The 1 percentage point difference from the national average was broadly maintained across the capital city, other city and rural/remote regions.

The 'demand' for AUSTUDY places from 30 or more year olds was consistently lower than the national average for men, and consistently higher for women. For example, in 1996 the proportion of men in that age group applying for AUSTUDY was 0.49 per cent (table B5) and the proportion of women 0.74 per cent (table B6),

4.4 Trends in the incomes of AUSTUDY applicants relative to the incomes of all Australians

The incomes for AUSTUDY applicants considered here are those recorded in the DETYA unit record datasets. The incomes for all Australians were obtained from the census (adjusted by NATSEM). Although the DETYA datasets also have information on applicants' family assets, this information will not be used in this subsection. This is partly because:

- data on the assets of AUSTUDY applicants are available only from 1990 onwards;
- between 1990 and 1997 AUSTUDY applicants' assets were quite small — some 80 per cent of applicants had family assets below $50 000 (in 1997 dollars) over the period; and
- population-wide statistics on assets are not generally available.

In examining whether AUSTUDY improved educational access for certain disadvantaged groups it is important to determine the proportion of the population that was eligible to apply for educational subsidies. The boundary between who was eligible and who was not was determined mainly by the 'parental income threshold' setting of AUSTUDY. (The settings of the AUSTUDY income tests over time are detailed in appendix C.) This was because in most years well over two-thirds of applicants had a 'dependent' status (see subsection 3.3), and thus their eligibility was determined by their parents' incomes. Consequently, the level at which the parental income threshold was set relative to the incomes of the population overall was a crucial variable affecting the maximum possible number of AUSTUDY students in any one year. The proportion of that number that actually applied depended on factors such as demographics and the desires of Australians to undertake further studies — that is the demand factor or take-up rate analysed earlier.

Because our study covers the 11 years 1987–97, when GDP increased more rapidly than the population did, we know that there was a general upward trend in the real incomes of Australians. The question is whether changes in the parental income threshold kept pace with these changes. If they did, roughly the same proportion of the population would have remained eligible throughout the study period. There were of course also significant changes in income distribution, which could have had an impact on the relative incomes of the parents of the student-age population. In the analyses carried out for this report, however, we were not required to consider shifts in income distribution. Table 4 shows the way the AUSTUDY parental income threshold changed relative to the incomes of the total Australian population, as well as the top family income in the population-wide quintile 2.

Table 4 **AUSTUDY income thresholds and gross family incomes of the Australian population**

Year	AUSTUDY parental income threshold (1)	Proportion of families with incomes below AUSTUDY threshold	Upper level of family income of quintile 2[a] within total population (2)	Threshold as a proportion of quintile 2[a] cut-off (1/2*100)
	$	%	$	%
1986-87	15 745	34.7	18 000	87.5
1991	18 150	30.3	23 450	77.4
1996	21 300	33.0	25 995	81.9
1997[b]	23 350	36.6	25 995	89.8

[a] Forty per cent of Australians would have had incomes below that upper level income in quintile 2. [b] Assuming that the Australia-wide income distribution and quintile thresholds remained unchanged between 1996 and 1997.

Sources: Census data on population-wide income groupings; information from DETYA on parental income thresholds for AUSTUDY.

Throughout the AUSTUDY period, the parental income threshold was administratively altered in a way that 'captured' 80–90 per cent of families with gross incomes falling into the lowest two income quintiles (table 4). During this period between 30 and 37 per cent of Australian families were eligible to apply for AUSTUDY support for their 'post-compulsory school age' dependent children. In 1986-87 the proportion of families with incomes below the AUSTUDY threshold was 35 per cent, but in 1991 it was 30 per cent. This suggests that the $18 150 threshold set in 1991 was not sufficient to maintain the 'eligible' group at its 1986-87 level. There then appears to have been a loosening of the threshold, which resulted in a slight expansion of the 'eligible' group beyond its 1986-87 level. The extent to which variations in the thresholds may have affected the take-up rate of AUSTUDY by 15–29 year olds is discussed in section 6.

An important conclusion from table 4 is that the income-based 'target' AUSTUDY population broadly followed the nationwide shifts in general income levels that occurred over the study period.

Although the regional distribution of family incomes is not tabulated in this report, earlier NATSEM research showed that incomes in capital cities were considerably higher than in rural areas. For example, in 1996 the average household income was 24 per cent higher in capital cities than in rural areas, and in 1991 it was 20 per cent higher (NATSEM 2000, p. 1).

5 Effects of changes in the 'age of independence'

Earlier we noted that the number of AUSTUDY applicants increased dramatically over the AUSTUDY period. Sections 5 and 6 examine the likely reasons for this and compare the significance of general economic and social factors with those that can be altered by varying the parameters of the AUSTUDY scheme.

In the previous section we showed that the parental income threshold probably had little impact on the number of AUSTUDY students because the Government altered it in such a way that the AUSTUDY eligibility of dependent students according to parental income was broadly maintained at the same level over the study period. Of course, had the parental income threshold been lowered considerably (for example, halved from its 1986-87 level), the number of AUSTUDY applicants would have declined dramatically.

Another AUSTUDY parameter under government control was the 'age of independence'. From 1987 to 1992 that age was 25 years. Then it was gradually lowered to be 22 years in 1995 and remained at that age in 1996. In the final year of AUSTUDY, it was returned to 25 years (table 5).[8]

Table 5 **Age of Independence for AUSTUDY**

Year	Age of independence
	years
1987 to 1992	25
1993	24
1994	23
1995	22
1996	22
1997	25

Source: Information provided by DETYA.

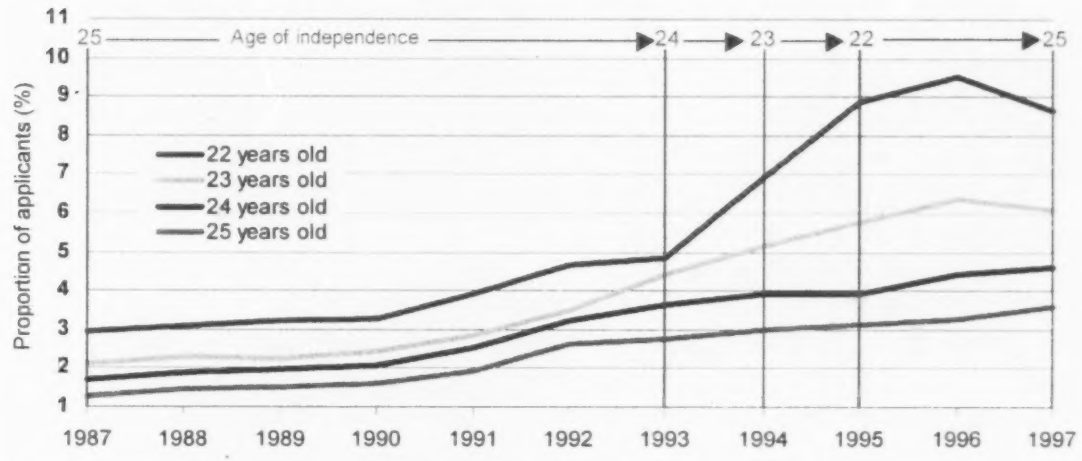
The lowering of the age of independence could have been expected to lead to a significant increase in the number of AUSTUDY applicants because it allowed previously ineligible students aged 22–24 to be assessed as 'independent' and thus obtain a subsidy. However, figure 13 shows that this expectation was not realised to any significant extent. For example, the number of 22 year old AUSTUDY applicants started to increase rapidly in 1994, although the 'age of independence' was reduced to 22 years only in 1995. The rate of growth in the number of 22 year old applicants then slowed in 1996, when the '22 year rule' still applied. The decline in the number

8 The change of the age of independence back to 25 was 'grandfathered' so those students

of 22 year old applicants in 1997, however, is consistent with the age of independence being once again set at 25 years. Similar inconsistencies with initial expectations can be found for the other ages graphed in figure 13.

This initial examination of the effects of the age of independence suggests that this parameter was not a major contributor to the rapid growth in the proportion of 22–25 year olds applying for AUSTUDY. Section 6 considers this issue in greater depth.

Figure 13 **Applicants for AUSTUDY as a proportion of all Australians by individual ages[a]**



[a] The ages used relate to the age of independence during the period.

Note: The age of independence is the age given at the top of the figure. For example, in 1993 that age was 24.
Source: Compiled from DETYA unit record data.

6 Factors explaining trends in the number of AUSTUDY applicants

To throw some light on the likely 'drivers' of the rapid increase in the number of AUSTUDY applicants and the flattening of that trend in the latter part of the study period, in this section we carry out some regression analyses. We also complement our findings with explanations found in recent publications by others.

6.1 Economic factors

It was seen earlier that changes to the settings of AUSTUDY could not explain most of the changes that occurred in the take-up rates of AUSTUDY. The question then is whether broad economic factors such as growth in gross domestic product (GDP) or

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Gross domestic product

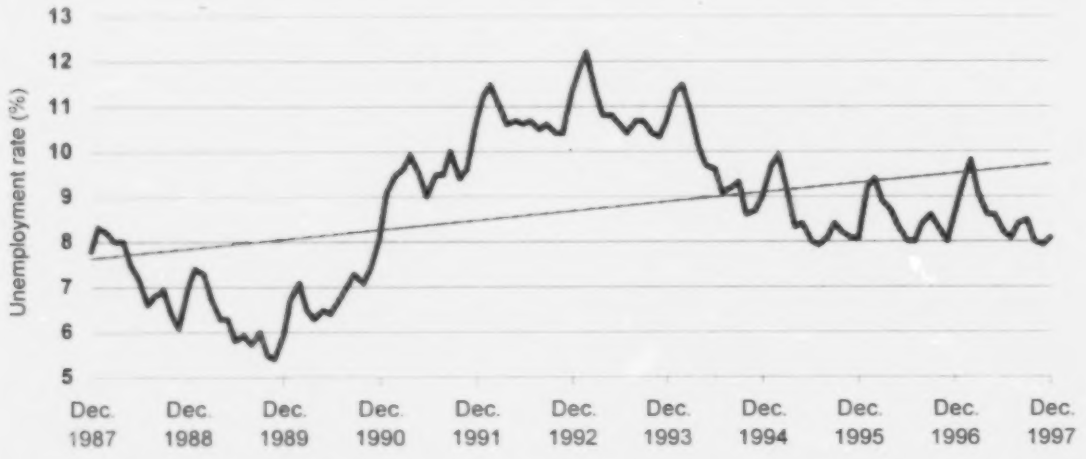
ABS statistics show that GDP, in current prices, grew steadily from $390 billion in 1987 to $540 billion by 1997. The trend growth rate was 3.7 per cent a year over the period. The general expectation is that people intending to undertake further studies are more likely to stay in the education system at times of low economic growth (since jobs are then harder to get) and to defer their studies at times of high economic growth. We would therefore expect AUSTUDY student numbers to have increased more slowly when economic growth was buoyant.

Unemployment

After decades of very low unemployment levels, from the early 1980s onwards Australians started experiencing historically high and fluctuating rates of unemployment. At the beginning of the AUSTUDY period, the unemployment rate was on a downward trend from 8 per cent to 6 per cent, but it then increased rapidly to fluctuate around 11 per cent in 1992 and 1993. It then settled at around 8.5 per cent from 1995 to 1997 (figure 14).

The general expectation is that young people respond to higher unemployment by staying in educational institutions (while waiting for better job opportunities) and vice versa. However, the realisation by Australians that unemployment was unlikely to go back to the 2–4 per cent range of the 1960s and early 1970s, and that highly variable unemployment rates and considerably less 'employment security' were here to stay, provided an incentive for many to undertake further studies. Added to this

Figure 14 **Monthly unemployment rates**



Data source: ABS gopher://gopher.abs.gov.au.

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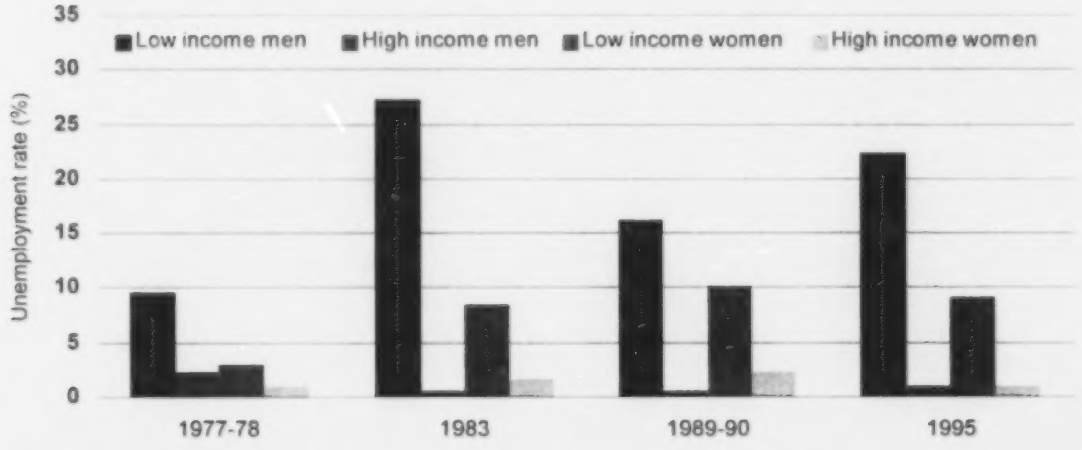
was the reform of the post-compulsory education system (see section 1), which encouraged Australia to move away from being the 'lucky country' and attempt to become the 'clever country'. Lifelong learning was also encouraged to help Australians redirect their skills in response to the relatively rapid changes in economic conditions.

Another trend that is likely to have affected applications for AUSTUDY in the 1980s and 1990s was the tendency for most of the fluctuations in unemployment to be absorbed by low income men. The unemployment rate for high income men and women was below 2 per cent in each of the four years studied between 1978 and 1995, when the unemployment rate for low income men fluctuated wildly, being highest in 1983 at 27 per cent (figure 15). In that year the general unemployment rate was around 9 per cent. These patterns are very much in line with the OECD finding (for developed countries generally) that 'those with higher levels of education are more likely to participate in the labour market and receive on average higher earnings' (OECD 1998, p. 54).

There is considerable Australian and international research that shows that income is strongly related to educational qualifications. Thus the patterns in unemployment shown in figure 15 may have had the effect of encouraging many more young people from low income families to apply for AUSTUDY than occurred in the TEAS period. This proposition is considered further in subsection 6.3.

Figure 15 **Unemployment rates of 20–64 year old men and women by income group**



Note: Low income is defined as the bottom 40 per cent of Australians ranked by family income, while high income refers to the remaining 60 per cent of the population.

Data source: Walker and Abello (2000, table F4).

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6.2 Regression analyses

To disentangle the effects of the economic and AUSTUDY-related variables on the proportion of the 15–29 year old population receiving AUSTUDY, we carried out a series of multiple linear regression analyses, covering the 11 years of the AUSTUDY scheme.

The *dependent variable* was:

SHARE = AUSTUDY recipients as a proportion of the total 15–29 year old population (as in figure 9).

The *independent variables* were:

GDP = the gross domestic product in $ billion (current prices);

UNMPL = the unemployment rate (see figure 14);

NYEAR = the trend variable (numbers ranging from 1 to 11);

and three AUSTUDY-related variables:

INCOME = the proportion of families with income below the AUSTUDY threshold (see table 4);

AGE = the 'age of independence' (varying between 22 and 25 years — see table 5); and

ALLOWANCE = the maximum weekly AUSTUDY allowance for dependants (aged 18 years or over, living at home — see appendix C) as a proportion of average weekly earnings (that is, the 'full-time adult ordinary time earnings' statistic published by the ABS — see subsection 1.1).

For some variables a number of formats were tried before settling on the above list of variables. For example, for GDP we tried the 'percentage change' format as well as the 'dollar billion' format[9] and for the trend variable we also tried the inverse of the years (that is, from 1/1 to 1/11[10]). However, the best results statistically were obtained for the set of variables listed above.

The results showed that the trend variable NYEAR had by far the greatest explanatory power, judging by the much larger coefficient estimated for 'trend' than

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[9] That is, the annual percentage change in GDP, as well as the dollar value of GDP in each of the 11 years (expressed as $ billion).

[10] That is, NYEAR specified as 1 to 11 over the years of the study period (1 for 1987, 2 for

for the other variables. Next in importance were INCOME, GDP, UNMPL[11], AGE and ALLOWANCE, in that order. Regressions[12] were carried out for NYEAR as the only independent variable, then NYEAR with each of the other above listed variables, and then for the full equation comprising all potentially influential variables[13] while still obtaining statistically significant results. This equation was:

(1) SHARE = 32.2 + 1.40 * NYEAR – 0.053 * GDP – 0.20 * INCOME

Table 6 summarises the results. It shows that the best fit was obtained for the full equation (1) specification, with an R-square statistic of 0.98. The results for AGE and

Table 6 **Multiple regressions modelling the demand for AUSTUDY places, 1987 to 1997**

	Coefficient for variable with NYEAR only			Coefficient for variable in equation (1)		
Intercept	*5.8*	(0.63)	[0.84]	*32.2*	(4.33)	[0.98]
NYEAR	*0.63*	(0.09)		*1.40*	(0.20)	
Intercept	*35.4*	(6.2)	[0.96]			
NYEAR	*1.73*	(0.23)				
GDP	*-0.079*	(0.017)		*-0.053*	(0.014)	
Intercept	1.9	(1.2)	[0.93]			
NYEAR	*0.53*	(0.07)				
UNMPL	*0.52*	(0.15)				
Intercept	*16.9*	(2.7)	[0.95]			
NYEAR	*0.63*	(0.06)				
INCOME	*-0.34*	(0.08)		*-0.200*	(0.062)	
Intercept	10.3	(8.5)	[0.84]			
NYEAR	*0.59*	(0.12)				
AGE	-0.18	(0.33)				
Intercept	-2.6	(3.3)	[0.91]			
NYEAR	*0.40*	(0.12)				
ALLOWANCE	*0.82*	(0.32)				

Note: Italicised figures are significant at the 0.05 level. Figures in brackets are standard errors and figures in square brackets R-square values.

Sources: ABS statistics as in figure 9; appendix C; DETYA unit record dataset; tables 4 and 5; ABS online statistics on GDP, unemployment and average weekly earnings.

[11] Other research suggests that unemployment may have had a more pronounced impact had it been possible to study its effect over the period of students' courses rather than on a year-by-year basis (see subsection 6.3).

[12] Using the SAS PROC REG function.

for ALLOWANCE were not statistically significant at the 0.05 level, hence their omission from equation (1).[14]

As expected, the coefficient for GDP was negative, indicating that buoyant economic times tend to have an attenuating effect on AUSTUDY applications, while the coefficient for UNMPL was positive. The coefficient for INCOME was also negative. This is unexpected, but may be explained by the considerable drop in the proportion of applicants qualifying for AUSTUDY between 1990 and 1993, when much of the increase in the 'demand' for AUSTUDY places occurred.

Overall, the regression analyses suggest that the overriding force behind the rapid increase in the proportion of 15–29 year olds with AUSTUDY support was a 'trend' factor that could not be explained by variations in the key economic variables or by changes in the settings of AUSTUDY. Nevertheless, changes in GDP and the AUSTUDY parental income threshold had a significant effect, with the rate of unemployment being less important, and the 'age of independence' and 'allowance' settings of AUSTUDY being statistically not significant.

6.3 Explanations in previous studies

Issues of relevance from earlier studies

So, what was behind the overriding importance of the 'trend' variable? Because the regression analyses left this question wide open, we searched in the literature hoping that the findings of previous studies could throw some light on this issue.

As shown earlier, the very rapid growth of the proportion of 15–29 year olds receiving AUSTUDY occurred between 1987 and 1992 (figure 9) when there were dramatic increases in AUSTUDY applicants among 15–17 year olds (for years 11 and 12) and to a lesser extent among 18–21 year olds (figure 5). However, these upward trends were reversed after 1992. That was when the proportion of applicants among the older age groups (22–24 and 25–29 year olds) increased. Research published previously supports these findings and studies that provide some explanation for these patterns are now discussed.

Explanations for the rapid increases in AUSTUDY applicants among 15–17 year olds — and the subsequent increases in year 12 completion rates — come from Long et al. (1999). These authors used information from the Australian Youth Survey and followed the post-compulsory school outcomes for cohorts of 19 year olds in 1980, 1984, 1989 and 1994. They concluded that by 1994 most young people in these

cohorts completed year 12, including those from low socioeconomic backgrounds (pp. 57–9).

In line with our findings (subsection 3.3), these authors concluded that year 12 completion rates increased considerably more rapidly for students with low socio-economic backgrounds than for those with higher socioeconomic backgrounds. Long et al. based this conclusion on the finding that between 1980 and 1994 year 12 completion rates increased by close to 50 per cent for students with fathers in professional or managerial jobs, by 150 per cent for those with fathers in clerical, skilled and unskilled occupations, and by nearly 250 per cent for students with fathers in semiskilled occupations. For example, the completion rate for students with fathers in professional jobs — which was already high in 1980 at 61 per cent — increased to 90 per cent by 1994. The corresponding figures for students with fathers in semiskilled occupations were 21 per cent in 1980, but 71 per cent in 1994. The authors summarised this finding as 'just over one in four students from a blue-collar background[15] completed school in the early 1980s compared with just under three in four in the 1990s' (p. 59).

The pattern was similar for higher education participation rates, although the increases — ranging from 60 to close to 100 per cent — were nowhere near as dramatic as for secondary students with low socioeconomic backgrounds. For students with fathers in blue-collar occupations, higher education participation rates increased by nearly 100 per cent between 1980 and 1994 and TAFE non-apprentice participation by a little more than 100 per cent. By contrast, participation rates in apprenticeships (including traineeships) declined over the period (Long et al. 1999, pp. 57–8).

Birrell et al. (2000, p. 54) commented that the 'reason for staying on to year 12 may reflect job market difficulties rather than higher education aspirations'. This is supported by the lower increases in the higher education participation rates of students with fathers with a lower socioeconomic status, than for the year 12 completion rates of such students. The comment is also in line with our expectations that Australia's high unemployment rates (after decades of low rates), combined with the brunt of this being borne by low skilled people, are likely to have been major contributors to the rapid rise in the number of young people from low socio-economic backgrounds undertaking post-compulsory studies (subsection 6.1).

Lamb (1998) noted that there was a decline in year 12 retention rates after 1992 and argued that the most likely reason for this was that the supply of better educated people started to outstrip the demand for them.[16] Lamb also noted that the decline in

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[15] Includes the students with fathers in skilled, semiskilled and unskilled occupations.

year 12 retention rates was greatest among students with low socioeconomic backgrounds.

Three other factors may have influenced the above trends. One relates to perceptions of job opportunities, both before taking on further studies and after the expected completion date of such studies. For example, it is plausible that the rapid increases in the rate of unemployment in the late 1980s and early 1990s – especially affecting people with low skill levels – encouraged more and more young people with low socioeconomic backgrounds to stay within the education system. According to this hypothesis, such students would have been waiting for the job situation to improve. Then, as the rate of unemployment started its downward trend in 1992 (figure 14), the proportion of those staying within the education system stabilised – with the remainder profiting directly from the improved job market.[17]

The second relates to supply-side changes in post-school education, in particular those that led to TAFE becoming 'a broadly based vocational education and training sector, rather than a more narrow vocational skilling sector' (Smith and Keating 1997, p. 9). Among other things, this led to increasing cooperation between schools and TAFE colleges, allowing young people to complete year 12 while they were studying for their TAFE qualifications (Long et al. 1999, p. x).

These changes were also likely to have contributed to the rapid increases in participation rates in 'non-apprenticeship' TAFE courses. Over the period 1980–94 higher participation rates were achieved by students from low income families, from rural backgrounds and/or from the lower end of the early school achievement profile (Long et al. 1999, p. x). This suggests that many of the AUSTUDY students with families from the lowest income quintile, who enrolled in school years 11 and 12 during the period 1989–92, may have continued their studies at TAFE institutions.

The third factor concerns the possibility that the rapid increases in the proportion of students receiving AUSTUDY between 1987 and 1992 may have 'exhausted' the pool of young people willing and able to undertake further studies. Of relevance to this argument Long et al. (1999) report on findings from their own analyses on 'youth in transition' cohorts (and from a similar ABS study) as to why young people chose to complete (or not complete) year 12. For those choosing to complete year 12, the most important reasons were 'obtaining a preferred job' and 'enjoying school', while for

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[17] Several research papers published in the 1980s supported this proposition. However, research using later data did not come up with similar support – see Long et al. (1999, p. 29). The exception was Karmel (1996), who was able to demonstrate a positive effect of higher unemployment rates on year 10 to 11 and year 11 to 12 progression rates by studying the sum of grade retention over several years of post-compulsory schooling. Karmel's work suggests that, in this context, young people respond to expectations of

those deciding to leave school the most important reasons were 'wanting job and/or money' and being 'fed up with school'. This 'disliking school' reason could be broken down into a perception by the student that he/she lacked academic ability and would not be able to complete year 12. A significant proportion also felt that they did not need to complete year 12 for what they wanted to do in future. Thus, it is possible that the increase in the proportion of AUSTUDY students enrolling in year 11 and 12 courses stabilised because the earlier period of rapid growth 'exhausted' the pool of school students able and willing to undertake further studies.

An important additional finding of Long et al. (1999, pp. 20–1) was that 'financial difficulties were, by comparison, not an important reason for leaving school for the majority of school leavers'. Possible explanatory factors for this included more readily available part-time work for students, increases in real family incomes and smaller family sizes. Thus higher family incomes could be spread across fewer children (pp. 30–2). As a result, financial pressures on families with dependent students were reduced.

Conclusions of particular relevance to this report

Based on the findings of the above studies, the rapid increases in the proportion of 15–29 year olds applying for AUSTUDY in the period 1987–92 seem most likely to have been due mainly to attitudinal changes among young people from low socio-economic backgrounds. In turn, these changes were probably triggered by the periods of historically high unemployment rates, both generally and among youths and the low skilled – hence the rapid increases in year 12 completion rates in the late 1980s and early 1990s. Other explanatory factors are likely to include the greater opportunities available to students with practical – rather than academic – talents, due to increased cooperation between schools and TAFE colleges, and a general lowering of financial pressures on families with dependent students.

However, when the unemployment rate started its downward trend in 1992 and/or the supply of better educated people started to outstrip the demand for them, the proportion of 15–29 year olds applying for AUSTUDY stabilised.

7 Discussion of key findings

This project attempted to provide answers to several key questions. While searching for the answers, a range of other important findings emerged. The 'Overview' presents a summary of the most important findings. This section discusses the answers provided to the few key questions initially identified.

Question 1 Were AUSTUDY students represented in the student population in proportion with the similarly disadvantaged in the total Australian population?

Answer 1 While this question is not directly addressed in the report, it is possible to provide a rough answer by using the material provided in earlier sections. First, figure 9 shows the proportions of all students as well as AUSTUDY students among 15–29 year olds. Second, table 4 provides estimates of the proportions of all Australian families with incomes below the AUSTUDY threshold for the three census years. Taking 35 per cent as the average of the proportion of families qualifying for AUSTUDY over our study period (table 4), we estimate that in 1986-87 the proportion of students receiving AUSTUDY was close to 40 per cent of what it would have been had the AUSTUDY take-up rate been the same as the 'all student take-up rate' – that is, the proportion of all students in the 15–29 year old population. The estimate for 1991 was 60 per cent and for 1996 it was 40 per cent. This suggests that the answer to question 1 is 'No'. However, it needs to be borne in mind that, due to the limitations of the DETYA unit record data, it was not possible to disaggregate the AUSTUDY population by income beyond the income threshold policy settings.

Question 2 In what respects were the attributes of AUSTUDY recipients different from those of the rest of the student population and those of the total Australian population?

Answer 2 By definition, AUSTUDY students came from low income backgrounds. Many also had parents with low education levels and low skilled occupations (subsections 3.3 and 6.3). In addition, a very much higher proportion of AUSTUDY students than of non-AUSTUDY students aimed to complete year 12 only (subsection 6.3).

Question 3 Which general demographic, social and economic factors could best explain the AUSTUDY-related trends observed over the study period and how important were these compared with the changes made to the AUSTUDY scheme itself?

Answer 3 Previous research suggests that broad shifts in economic conditions – such as GDP growth and the tendency for fluctuations in unemployment levels to be borne by low skilled people – may have made post-school education more attractive to disadvantaged groups, especially in the early part of the AUSTUDY period. The

cooperation, is also likely to have been a contributing factor. Factors contributing to the stabilisation of the participation rate in the latter part of the period could include the improvements in the employment situation, the 'exhaustion' of the pool of disadvantaged young people able and willing to undertake post-school studies, and a narrowing of the gap between the demand for skilled workers and the supply of people with such qualifications.

Our statistical analyses suggested that, of the policy settings of AUSTUDY, the level at which the income threshold was set was more influential than changes to the age of independence. However, the importance of the 'trend' variable – possibly embodying responses to social, economic and educational supply changes – was several orders of magnitude greater than that of any of the other variables considered (subsection 6.2).

Question 4 Were AUSTUDY take-up patterns in the 'city' different from those in the 'bush'?

Answer 4 While the proportions of 15–29 year olds applying from the bush were consistently significantly lower than for those applying from the cities, the 'bush' was found to be 'catching up' quite rapidly (subsection 4.2).

Question 5 How well did AUSTUDY achieve its objectives?

Answer 5 Considering the objectives listed in section 1, the barriers to the further education of students from lower socioeconomic backgrounds were lowered during the AUSTUDY period. The finding in subsection 4.1 that the proportion of AUSTUDY students among all 15–29 year old Australians increased by 100 per cent (compared with 50 per cent for all students) supports this conclusion. Similar support is provided by the answer to question 2 above. Another feature of the AUSTUDY period was the very rapid increase in AUSTUDY-assisted lifelong learning (section 4). Although our study did not attempt to demonstrate causation, it appears that the AUSTUDY policy settings, as well as a more cooperative approach between TAFE institutions and schools, facilitated access to higher education at a time of greater educational aspirations by people with lower socioeconomic backgrounds.

8 Lessons for the Youth Allowance

The Youth Allowance, introduced in 1998, is in many respects similar to AUSTUDY. However, it also encompasses the earlier 'new student allowance' program. Major differences are that the policy settings of the Youth Allowance are more advantageous to full-time rather than part-time students and that the scheme also applies to people under 21 years of age who are looking for work or are studying part-time while working (Szukalska and Robinson 2000). Newman (1999b, p. 1) states that:

> Youth Allowance was designed in part to remove disincentives to study which existed in the former system. Under the previous system, young people got more money to be unemployed than to continue in education or training. This included finishing year 12 as well as tertiary education and training.

While the main purpose of this project was to assess the effectiveness of AUSTUDY rather than to carry out comparisons with the Youth Allowance, it is possible to make some comments on how post-AUSTUDY schemes may benefit from what was learned during the AUSTUDY period.

First, it seems important to arrange future data collection so that *more accurate time-series information* is available on parental incomes, assets, education, occupation and employment status, and on the number of siblings. While our analyses of the AUSTUDY data seemed to support the findings of other studies that most of the growth in applicants came from the bottom half of the eligible income range for AUSTUDY, and that AUSTUDY students had parents with low skill and education levels, this could not be firmly established due to the data having been collected with a unique focus on administrative issues. With improved coverage of parental employment status, it should be possible to separately analyse patterns for students with parents who have been long-term unemployed. This is an important issue because young people with such parents have been shown to be more likely to become long-term unemployed themselves.[18] It is also worth noting that our exploratory analyses on income thresholds for the whole of Australia (table 4) could be extended to a regional analysis if better AUSTUDY-related income data became available. Another extension could be the development of regional 'income adjusted' AUSTUDY 'take-up' rates.

A further issue is whether young people with low socioeconomic backgrounds should be given *additional incentives* to continue their studies beyond year 12. During the AUSTUDY period many such young people made an effort to complete years 11 and 12, but it is not clear why a high proportion chose not to undertake tertiary studies (although it is likely that some did enrol in TAFE courses). If this issue is

important, perhaps further changes to the educational supply situation should be considered – for example, changes that would provide greater access to qualifications for those who tend not to do well in the traditional school system. A broader range of further education options is likely to be particularly relevant if 'low income' alone continues to lose its importance in who continues with their education (due to family incomes continuing to rise and family sizes to decline). In such a world the focus of a scheme such as the Youth Allowance may shift more towards servicing students from a disadvantaged background rather than focusing on students from low income families per se.

If the issue of additional incentives were seen to be important, further research on why students from disadvantaged backgrounds tend to choose not to go beyond year 12 would be useful (see Spierings 1999). However, the possibility of creating an oversupply of people with tertiary qualifications needs to be borne in mind, unless the additional incentives focused on the 'low income – high income' student split rather than on increasing the number of low income tertiary students per se. On this topic Gregory and Karmel (1992, p. 8) refer to research that shows that the return to education to new entrants to the tertiary sector may be extremely low or even negative. They state that this 'calls into question the policy of attempting to increase education levels across-the-board'. Also, an alternative to additional incentives for the traditional 15–29 years age group could be to focus policy effort on lifelong learning.

Overall, our study suggests that AUSTUDY tended work in hand with the considerable social and economic changes that occurred over the period from 1987 to 1997. For example, the proportion of the population qualifying for AUSTUDY remained steady due to appropriate adjustments to income thresholds, and the scheme was open enough to allow very rapid growth in the number of low income Australians wishing to take part in lifelong learning. However, greater understanding of why the increase in the number of applicants from low income families flattened in the latter part of the study period, and why many students with such a background aimed only to complete year 12 at school, should have important implications for the Youth Allowance. In addition, previous studies note that, if changes in policy are to be considered, such changes should aim to better provide support to the disadvantaged rather than to increase education levels beyond the demand for educated workers in the labour market.

A Adding a regional dimension to AUSTUDY applicants' records

To add a regional dimension to the DETYA unit record dataset, all of the observations (AUSTUDY applicants) were assigned a region on the basis of the postcode of their home address. The regions were 'metropolitan', 'other urban' and 'rural', as defined in section 2. This was done with the help of postcode-to-region concordances for the three census years of 1986, 1991 and 1996.

The concordances used to assign a region to the observations in each of the non-census years are shown in table A1.

Table A1 **Postcode-to-region concordances in various years**

From the 1986 census	From the 1991 census	From the 1996 census
1987	1989	1994
1988	1990	1995
	1991	1996
	1992	1997
	1993	

* Not all postcodes were included in the concordances: some postcodes had too small a population (with the possibility of identification of individuals), and others such as business postcodes, mailing centre postcodes and special postcodes were not included.

Where a postcode was comprised of some metropolitan and either other urban or rural areas, the region that had over 50 per cent of the population was the region assigned to the postcode.

In the 1996 concordance there were four postcodes that did not have over 50 per cent of the population in a single region. Those postcodes were 3984, 4306, 6367 and 7140. Table A2 shows the proportion of the population of each of these postcodes by region, and the region allocated to each postcode. The region allocated was based on the region with the largest proportion of the population. If the proportions were the same (6367 and 7140) the region allocated was in the order of rural, other urban and metropolitan. (The postcode was allocated a region only if some of its population lived in that region.)

All of the postcodes in the 1986 and the 1991 concordances had a simple majority in one region, and that was the region assigned to the postcode.

There were many AUSTUDY applicants that had a postcode that was not 'valid' – that is, it did not appear in the concordances. Reasons for this included the possibility that the student omitted the postcode when completing the application, an incorrect postcode was used, or there may have been data entry problems.

Table A2 **Postcodes without a majority in a single region: 1996 census concordance of postcodes to regions**

Post code	State	Proportion in a metropolitan region	Proportion in another urban region	Proportion in a rural region	Region allocated to postcode
		%	%	%	
3984	Victoria	32	49	18	Other urban
4306	Queensland	41	9	49	Rural
6367	Western Australia	0	50	50	Rural
7140	Tasmania	48	3	48	Rural

Source: DETYA unit record data; ABS listing of postcodes in 1996 census.

To overcome this problem applicants without a valid postcode were randomly assigned a region in such a way that the regional proportions of the observations with a 'valid' postcode in their State remained intact. The proportion with invalid postcodes was below 2 per cent in all AUSTUDY years (see table A3).

The Northern Territory had a particularly high proportion of AUSTUDY applicants that did not have a valid postcode. In this case regional shares were imputed on the basis of the regional shares for the total population of 15–29 year olds within the Territory.

Table A3 **Number and proportions of AUSTUDY applicants with invalid postcodes**

	Number of observations without a 'valid' postcode	Proportion of total observations in that year
	no.	%
1987	3401	1.33
1988	5928	1.86
1989	4381	1.29
1990	4588	1.17
1991	5709	1.25
1992	7294	1.42
1993	7697	1.46
1994	4203	0.79
1995	3648	0.69
1996	4644	0.85
1997	5147	0.96

B AUSTUDY applicants by gender

Table B1 **Distribution of male AUSTUDY applicants by State and region**

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	%	%	%	%	%	%	%	%	%	%	%
Australian Capital Territory											
Capital city	100.0	100.0	99.5	99.3	99.4	99.3	98.9	99.0	99.0	99.1	99.1
Other city	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.6	0.4	0.4	0.4
Rural/remote	0.0	0.0	0.5	0.7	0.6	0.7	0.6	0.5	0.7	0.5	0.5
New South Wales											
Capital city	61.1	59.0	57.3	57.5	57.9	58.4	59.9	60.5	61.8	61.5	60.8
Other city	34.7	37.0	39.0	38.6	38.0	37.6	36.0	35.5	34.2	34.5	35.3
Rural/remote	4.2	4.0	3.8	3.9	4.1	4.1	4.2	4.1	4.0	4.0	3.9
Northern Territory											
Capital city	41.7	40.9	42.5	40.8	42.2	43.2	42.1	42.7	45.2	45.2	43.9
Other city	47.2	47.5	42.2	44.4	43.2	41.5	42.5	44.5	42.7	43.0	43.3
Rural/remote	11.2	11.6	15.3	14.8	14.7	15.3	15.4	12.9	12.2	11.8	12.7
Queensland											
Capital city	47.1	46.6	46.4	45.4	45.2	45.5	45.8	47.0	48.5	48.4	47.4
Other city	44.0	44.4	43.2	44.3	44.4	44.0	43.3	40.6	39.6	39.7	40.5
Rural/remote	8.8	9.1	10.5	10.3	10.4	10.6	11.0	12.4	11.9	11.9	12.2
South Australia											
Capital city	76.8	75.0	74.6	74.5	73.4	73.4	74.0	75.8	77.1	78.3	78.3
Other city	16.2	17.9	17.8	17.4	18.2	18.1	17.6	17.7	16.9	15.7	16.0
Rural/remote	7.0	7.2	7.6	8.1	8.4	8.5	8.4	6.5	6.0	6.0	5.6
Tasmania											
Capital city	44.8	42.0	40.5	40.2	39.2	38.0	37.8	37.6	38.3	39.1	38.0
Other city	44.9	48.7	47.0	47.5	48.5	49.1	48.4	45.4	44.6	44.7	45.4
Rural/remote	10.4	9.4	12.5	12.4	12.4	12.9	13.8	17.0	17.1	16.3	16.6
Victoria											
Capital city	71.0	68.7	68.3	68.4	68.6	68.9	69.6	70.6	71.5	71.6	70.9
Other city	22.2	24.2	24.9	24.7	24.4	23.9	23.4	22.8	22.3	22.2	22.8
Rural/remote	6.9	7.1	6.7	6.9	7.1	7.2	7.1	6.6	6.3	6.2	6.2
Western Australia											
Capital city	82.6	82.9	81.1	81.1	81.1	79.3	79.3	81.1	82.0	82.9	82.1
Other city	13.3	13.0	14.2	14.5	14.3	15.6	15.4	15.3	14.6	13.9	14.5
Rural/remote	4.1	4.1	4.7	4.4	4.7	5.2	5.3	3.6	3.4	3.3	3.4
Australia											
Capital city	64.8	63.1	61.9	61.8	62.1	62.2	63.0	64.0	65.3	65.4	64.6
Other city	29.0	30.7	31.7	31.7	31.2	31.0	30.2	29.3	28.3	28.2	28.9
Rural/remote	6.1	6.2	6.4	6.5	6.7	6.8	6.9	6.7	6.4	6.4	6.5

Note: The proportions may not add to 100 due to rounding.

Table B2 **Distribution of female AUSTUDY applicants by State and region**

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
	%	%	%	%	%	%	%	%	%	%	%
Australian Capital Territory											
Capital city	100.0	100.0	99.6	99.5	99.6	99.6	99.2	99.0	99.2	99.2	98.8
Other city	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.4	0.3	0.4	0.6
Rural/remote	0.0	0.0	0.4	0.5	0.4	0.5	0.6	0.6	0.5	0.4	0.6
New South Wales											
Capital city	57.8	56.4	55.1	55.9	56.7	56.3	57.4	57.8	58.6	58.6	57.7
Other city	37.5	39.2	40.7	39.9	39.1	39.5	38.4	38.1	37.4	37.3	38.2
Rural/remote	4.7	4.4	4.3	4.2	4.3	4.2	4.2	4.1	4.0	4.1	4.1
Northern Territory											
Capital city	40.9	43.3	41.6	43.1	41.2	40.2	41.2	45.0	43.0	42.7	44.0
Other city	47.6	46.9	43.9	41.4	43.3	44.7	43.8	42.8	44.3	44.1	43.7
Rural/remote	11.5	9.8	14.5	15.6	15.5	15.0	15.0	12.2	12.7	13.2	12.3
Queensland											
Capital city	45.8	45.6	45.8	44.1	44.6	44.7	45.0	45.9	46.8	47.0	45.9
Other city	44.6	44.4	43.4	44.7	44.4	44.6	43.9	41.8	40.8	40.9	41.5
Rural/remote	9.5	10.0	10.8	11.2	11.0	10.7	11.0	12.3	12.4	12.1	12.5
South Australia											
Capital city	75.0	72.9	72.7	72.2	72.0	71.9	72.4	73.9	75.1	76.2	76.6
Other city	17.2	19.2	19.3	19.2	19.2	19.6	18.8	19.5	18.6	17.7	17.5
Rural/remote	7.8	7.9	8.0	8.6	8.8	8.5	8.7	6.6	6.3	6.1	5.9
Tasmania											
Capital city	39.6	38.0	37.1	37.0	37.7	36.7	37.5	37.3	37.8	38.0	37.7
Other city	49.4	51.9	48.6	49.2	48.4	49.3	47.7	44.9	44.9	44.9	45.7
Rural/remote	11.0	10.1	14.3	13.8	13.9	14.0	14.8	17.8	17.3	17.2	16.7
Victoria											
Capital city	68.5	66.5	66.2	66.6	67.0	67.5	68.2	69.0	69.4	69.7	69.0
Other city	23.6	25.5	26.4	26.1	25.7	25.2	24.5	24.1	23.8	23.7	24.4
Rural/remote	7.9	8.0	7.4	7.4	7.3	7.3	7.2	6.9	6.8	6.6	6.7
Western Australia											
Capital city	80.5	81.0	79.7	78.3	79.3	77.1	77.1	78.8	80.0	80.7	80.2
Other city	14.5	14.2	15.2	16.6	15.4	17.1	17.1	17.1	16.3	15.9	16.2
Rural/remote	5.0	4.8	5.2	5.1	5.3	5.9	5.8	4.2	3.8	3.5	3.6
Australia											
Capital city	62.4	61.0	60.1	60.0	60.8	60.6	61.3	62.1	63.0	63.2	62.4
Other city	30.8	32.2	33.0	32.9	32.2	32.4	31.7	31.0	30.3	30.2	30.9
Rural/remote	6.9	6.8	6.9	7.0	7.0	7.0	7.0	6.9	6.7	6.6	6.8

Note: The proportions may not add to 100 due to rounding.

Table B3 **AUSTUDY take-up rates among 15–29 year old males, by State and region**

	1986-87	1991	1996
	%	%	%
Australian Capital Territory			
Capital city	4.9	9.9	11.0
Other city	0.0	0.0	0.0
Rural/remote	0.0	3.1	5.7
All regions	4.9	9.7	11.0
New South Wales			
Capital city	5.5	9.0	10.7
Other city	6.7	13.2	13.5
Rural/remote	2.4	4.4	5.4
All regions	5.5	9.8	11.1
Northern Territory			
Capital city	1.8	5.2	4.9
Other city	2.5	7.3	5.6
Rural/remote	0.5	1.9	1.5
All regions	1.9	5.2	4.6
Queensland			
Capital city	7.0	10.7	11.2
Other city	7.1	11.8	10.3
Rural/remote	3.3	6.9	8.9
All regions	6.4	10.5	10.5
South Australia			
Capital city	7.0	10.3	13.0
Other city	6.7	12.5	13.2
Rural/remote	3.7	8.2	8.3
All regions	6.5	10.4	12.6
Tasmania			
Capital city	6.1	11.2	12.1
Other city	5.5	12.2	12.6
Rural/remote	3.1	7.4	10.9
All regions	5.3	10.9	12.1
Victoria			
Capital city	6.0	10.7	13.1
Other city	6.9	15.2	16.7
Rural/remote	4.1	8.0	9.2
All regions	6.0	11.3	13.4
Western Australia			
Capital city	7.1	11.1	11.5
Other city	3.8	7.0	7.1
Rural/remote	1.9	4.1	2.9
All regions	5.8	9.5	9.7
Australia			
Capital city	6.1	10.1	11.8
Other city	6.5	12.6	12.5
Rural/remote	3.1	6.2	7.2
All regions	5.8	10.3	11.5

Source: DETYA unit record data; ABS census data.

Table B4 **AUSTUDY take-up rates among 15–29 year old females, by State and region**

	1986-87	1991	1996
	%	%	%
Australian Capital Territory			
Capital city	5.1	9.8	11.7
Other city	0.0	0.0	0.0
Rural/remote	0.0	2.4	9.9
All regions	5.1	9.7	11.7
New South Wales			
Capital city	6.0	10.1	12.0
Other city	8.3	15.4	16.6
Rural/remote	3.6	6.2	7.7
All regions	6.4	11.3	13.0
Northern Territory			
Capital city	1.5	4.9	5.4
Other city	2.3	7.1	6.7
Rural/remote	1.3	4.0	4.3
All regions	1.8	5.4	5.7
Queensland			
Capital city	7.1	11.1	12.5
Other city	7.7	12.5	12.2
Rural/remote	4.5	9.0	12.3
All regions	6.9	11.4	12.4
South Australia			
Capital city	7.0	10.8	14.2
Other city	7.4	13.9	16.9
Rural/remote	5.4	10.8	11.3
All regions	6.9	11.3	14.4
Tasmania			
Capital city	5.8	11.6	13.1
Other city	6.3	13.5	14.4
Rural/remote	3.9	10.5	14.3
All regions	5.7	12.1	13.9
Victoria			
Capital city	6.7	11.8	14.5
Other city	8.4	17.5	19.8
Rural/remote	6.1	10.5	13.0
All regions	7.0	12.7	15.4
Western Australia			
Capital city	7.2	11.5	13.0
Other city	4.6	8.5	9.7
Rural/remote	3.3	6.5	5.4
All regions	6.3	10.5	11.8
Australia			
Capital city	6.5	10.9	13.1
Other city	7.7	14.2	15.1
Rural/remote	4.5	8.4	10.4
All regions	6.6	11.5	13.4

Source: DETYA unit record data; ABS census data.

Table B5 **AUSTUDY take-up rates among 30 or more year old males, by State and region**

	1986-87	1991	1996
	%	%	%
Australian Capital Territory			
Capital city	0.19	0.34	0.50
Other city	0.00	0.00	0.00
Rural/remote	0.00	0.00	0.00
All regions	0.18	0.34	0.50
New South Wales			
Capital city	0.11	0.17	0.48
Other city	0.10	0.19	0.50
Rural/remote	0.01	0.04	0.11
All regions	0.09	0.16	0.45
Northern Territory			
Capital city	1.14	2.78	2.41
Other city	1.78	4.14	2.77
Rural/remote	0.01	1.55	1.44
All regions	1.14	2.87	2.36
Queensland			
Capital city	0.16	0.26	0.59
Other city	0.07	0.19	0.41
Rural/remote	0.03	0.07	0.23
All regions	0.10	0.20	0.45
South Australia			
Capital city	0.24	0.36	0.79
Other city	0.06	0.18	0.43
Rural/remote	0.06	0.10	0.15
All regions	0.19	0.29	0.65
Tasmania			
Capital city	0.20	0.33	0.59
Other city	0.15	0.41	0.70
Rural/remote	0.10	0.23	0.40
All regions	0.16	0.34	0.59
Victoria			
Capital city	0.12	0.20	0.45
Other city	0.06	0.16	0.40
Rural/remote	0.02	0.06	0.16
All regions	0.09	0.17	0.40
Western Australia			
Capital city	0.28	0.41	0.73
Other city	0.05	0.16	0.31
Rural/remote	0.02	0.05	0.10
All regions	0.20	0.31	0.56
Australia			
Capital city	0.16	0.26	0.56
Other city	0.10	0.23	0.48
Rural/remote	0.03	0.10	0.19
All regions	0.12	0.23	0.49

Source: DETYA unit record data; ABS census data.

Table B6 **AUSTUDY take-up rates among 30 or more year old females, by State and region**

	1986-87	1991	1996
	%	%	%
Australian Capital Territory			
Capital city	0.28	0.38	0.73
Other city	0.00	0.00	0.00
Rural/remote	0.00	0.00	0.00
All regions	0.28	0.38	0.73
New South Wales			
Capital city	0.19	0.26	0.65
Other city	0.24	0.34	1.03
Rural/remote	0.05	0.08	0.26
All regions	0.19	0.27	0.74
Northern Territory			
Capital city	1.06	3.00	2.91
Other city	1.82	4.73	3.70
Rural/remote	0.87	2.36	2.48
All regions	1.29	3.39	3.14
Queensland			
Capital city	0.26	0.33	0.78
Other city	0.16	0.28	0.65
Rural/remote	0.06	0.14	0.40
All regions	0.19	0.28	0.66
South Australia			
Capital city	0.32	0.42	1.07
Other city	0.11	0.27	0.83
Rural/remote	0.10	0.22	0.34
All regions	0.26	0.37	0.96
Tasmania			
Capital city	0.25	0.33	0.71
Other city	0.23	0.36	0.85
Rural/remote	0.16	0.19	0.51
All regions	0.23	0.31	0.73
Victoria			
Capital city	0.14	0.22	0.57
Other city	0.12	0.24	0.71
Rural/remote	0.07	0.12	0.29
All regions	0.13	0.21	0.57
Western Australia			
Capital city	0.36	0.51	1.09
Other city	0.15	0.24	0.83
Rural/remote	0.07	0.09	0.17
All regions	0.29	0.42	0.95
Australia			
Capital city	0.22	0.32	0.75
Other city	0.20	0.34	0.87
Rural/remote	0.08	0.16	0.35
All regions	0.20	0.31	0.74

Source: DETYA unit record data; ABS census data.

C Changes in the settings of AUSTUDY

Table C1 **Maximum annual AUSTUDY allowances**

	1997	1994	1990	1987
	$	$	$	$
Dependent, at-home				
Under 18 years	3 780	3 449	3 000	2 086 (2 607)[a]
18 years or over	4 546	4 148	3 600	2 346 (2 868)[a]
Special groups (English as a second language, long term unemployed)	5 577	5 089	4 270	-
Dependent, away-from-home[b]				
Independent				
Under 18 years	6 240	5 694	4 950	3 821
18 years or over	6 898	6 296	5 470	4 171
Special groups (English as a second language, long term unemployed)	8 381	7 649	6 490	-
Sole parent	8 910	8 132	7 620	-
Pensioner Education Supplement[c]	1 560	1 560	1 560	780
Dependent Spouse Allowance[d]	7 580	6 917	2 226	2 220

[a] Figures in brackets show the higher rates that were available for tertiary studies for students living at home. [b] In 1987 and 1988, there was no away-from-home rate for general secondary students. They got the same rate as at-home students. Adult secondary (age 19+) could get the away rate. In 1987 and 1988, there was also a differential between the applicable rates for tertiary and secondary studies. [c] The Pensioner Education Supplement was available to students who already received a certain pension or allowance from the Department of Social Security or the Department of Veterans' Affairs (for example, sole parent, disability support, carer's, widow B pensions). The Pensioner Education Supplement of $60 a fortnight was designed as a 'top-up' payment to help them meet the cost of study. [d] The Dependent Spouse Allowance was available only when the spouse did not receive Additional Parenting Allowance or some other Commonwealth benefit (for example, AUSTUDY or Newstart).

Source: DETYA.

Table C2 Income tests

	1997	1994	1990	1987
	$	$	$	$
Income thresholds[a]				
Parental income	23 350	21 300	18 150	15 745
Spouse income	14 690	13 400	18 150	15 745
Student income	6 000	6 000	3 000	2 000
Dependent Spouse Allowance income	1 560	1 560	1 560	1 560
Income taper rates[b]				
Parental income	4	4	4	4
Spouse income	2	2	2	Immediate cut-off
Student income	2	2	2	2
Sibling income concessions[c]				
First dependent child under 16	1 200	1 200	1 200	450
Each other dependent child under 16	2 500	2 500	2 500	450
Each dependent student age 16+	3 700	3 700	Taper rate • 2	450 (& taper rate *2)
Family assets thresholds[d]				
Dependent	405 960	369 350	322 750	-
Married	171 820	156 800	137 000	-
Single	120 580	110 000	96 000	-

[a] Income threshold indicates the cut-off point up to which maximum allowances could be paid. The applicable parental or spouse income was the income in the financial year ending in the year prior to study. The income was calculated as: taxable income + negative gearing (rental property) + fringe benefits over $1000 + overseas taxable income + maintenance received – maintenance paid – sibling concession. [b] Taper rates show the amount of extra income (above the threshold) that caused a $1 reduction in allowance. For example, the annual allowance decreased by $1 for every $4 the parental income was above the threshold. [c] The number of siblings/dependants did not include the student him/herself, dependants in state care or persons getting a social security benefit in their own right (for example, Newstart, Youth Training Allowance). The concession amount applied to the parental and spouse income tests only, not the student income test. The students over 16 category also included students under 16 receiving AIC boarding or second-home allowance. The category of 'dependent student age 16+' had a different effect from 1987 to 1991. The effect was not to reduce the parent's assessable income, but to reduce the taper rate where the income was above the threshold (for example, the normal taper rate was 4:1, but one sibling produced a taper rate of 8:1, 2 siblings 16:1, etc.). [d] The assets test was based on family assets — that is, the assets of the parent/spouse, the student and any other dependent children. The assets test was introduced in 1989.

Source: DETYA.

D Mapping AUSTUDY take-up rates in States and capital cities, 1996

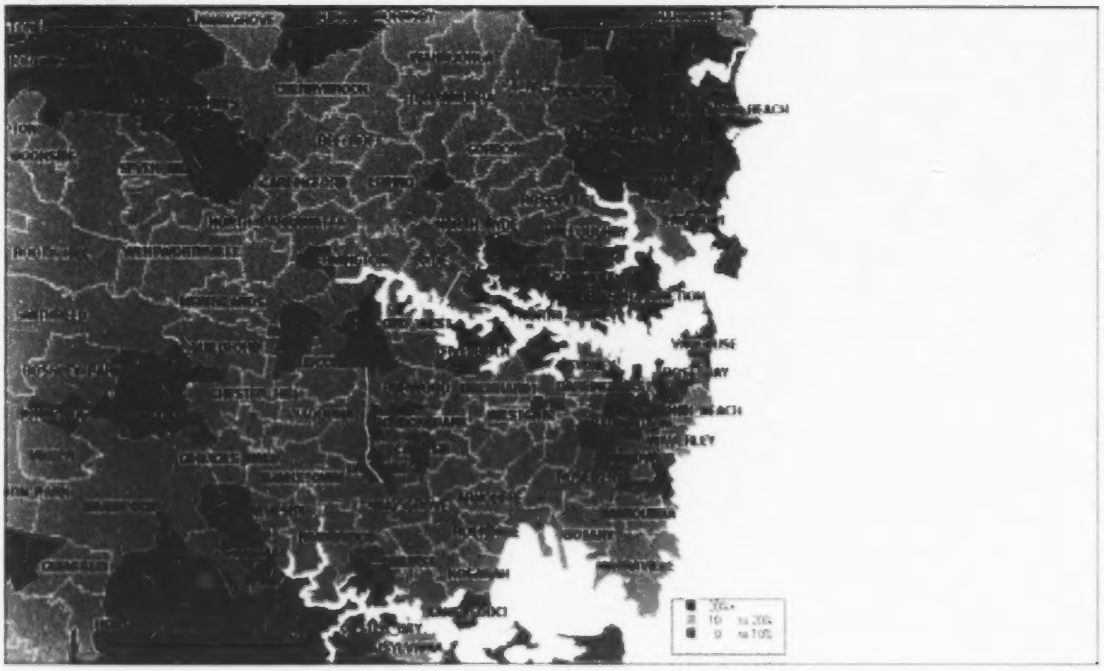
The maps in this appendix report differences in AUSTUDY take-up rates in 1996 by postcode. These rates were computed as the proportion of AUSTUDY applicants in the total population of 15–29 year olds in each postcode.

Maps were produced for each State and its capital city. Maps were not produced for the Northern Territory because of the very high number of invalid postcodes entered for AUSTUDY applicants. A map for the ACT is presented in subsection 4.2.

Data sources for all maps are DETYA unit record data and census data.

New South Wales

Sydney



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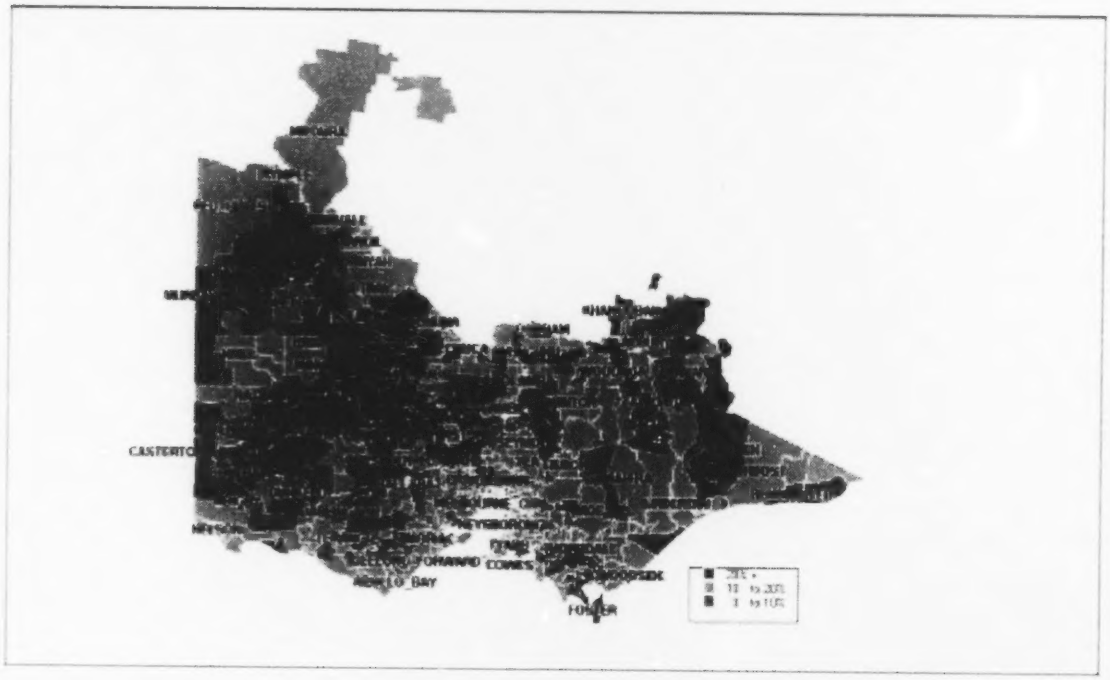
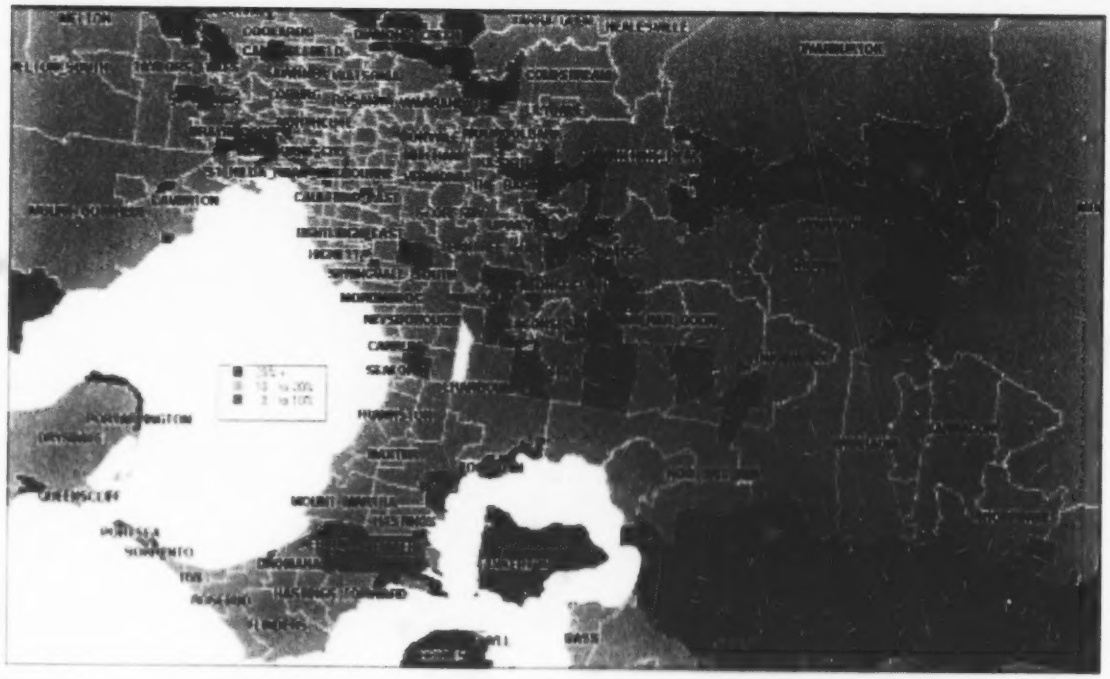
Victoria



Melbourne



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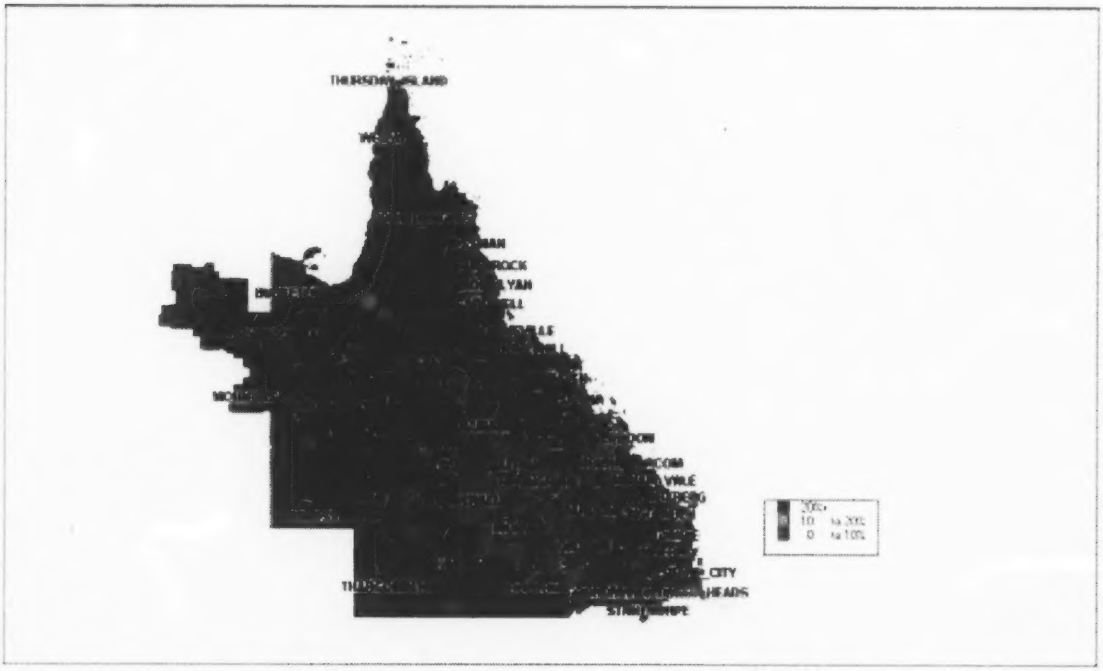
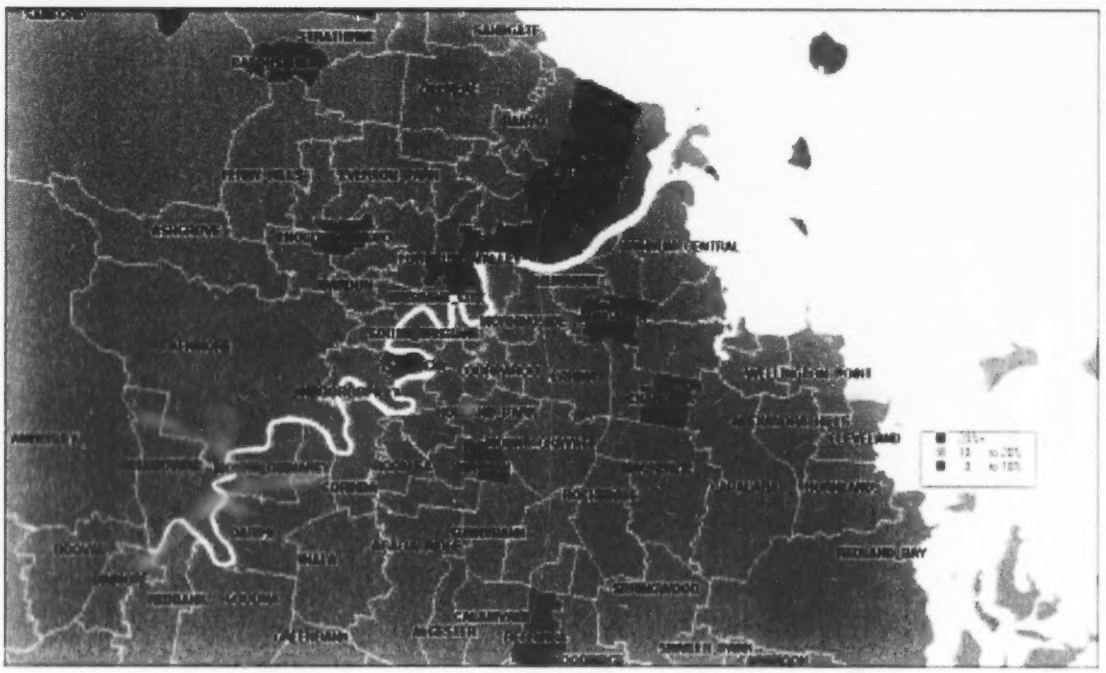
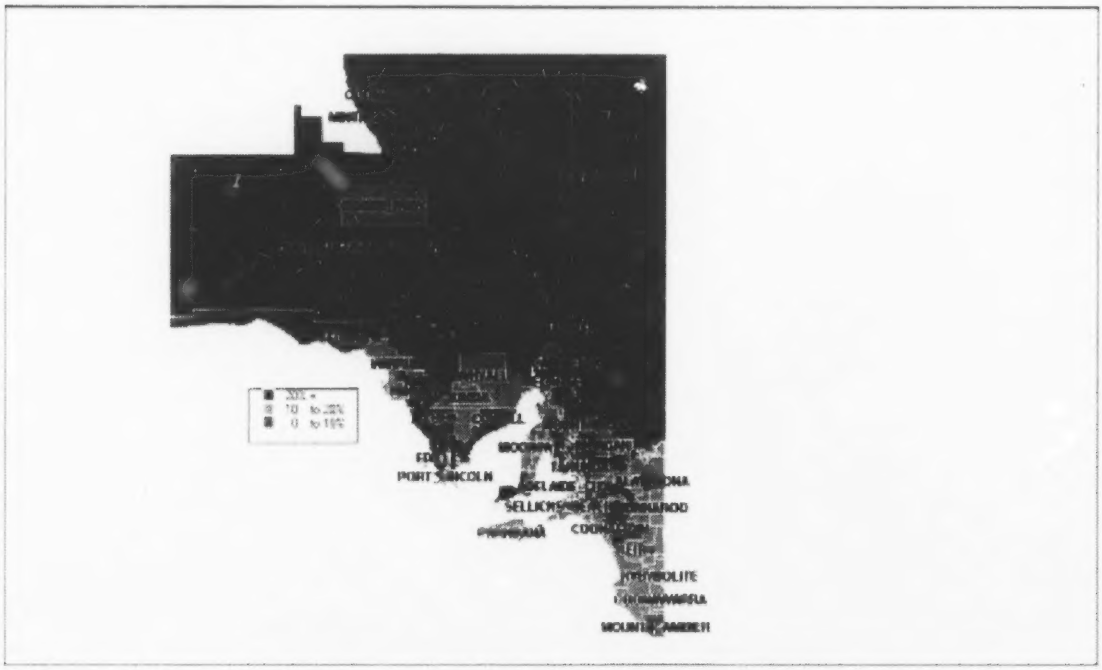
Queensland



Brisbane



South Australia



Adelaide

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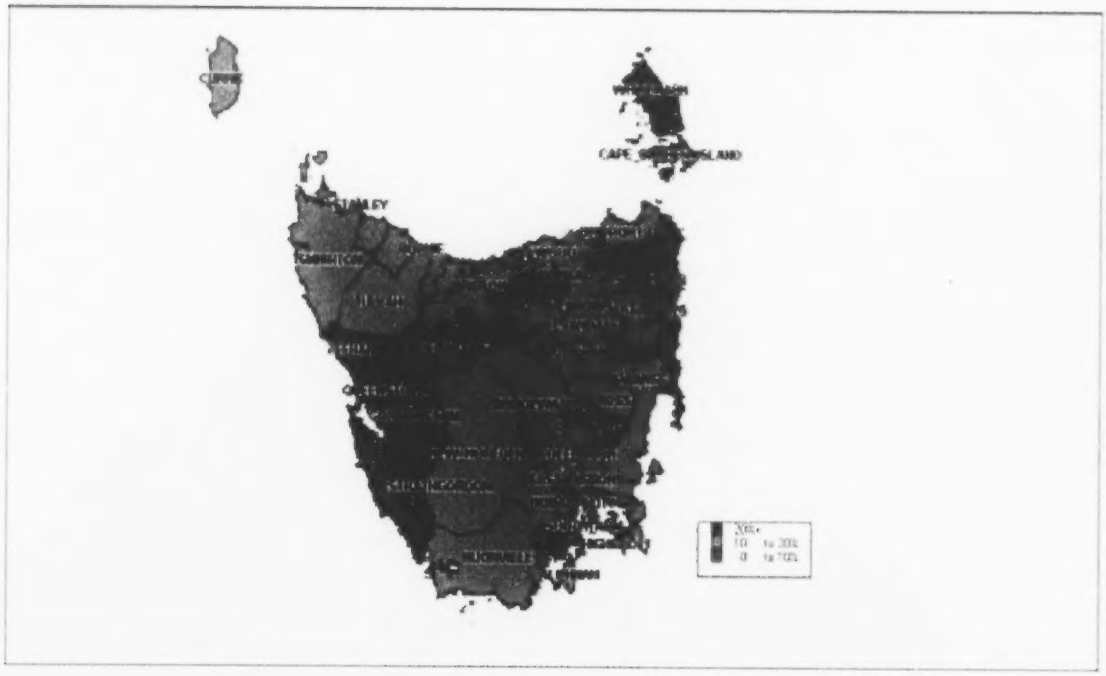
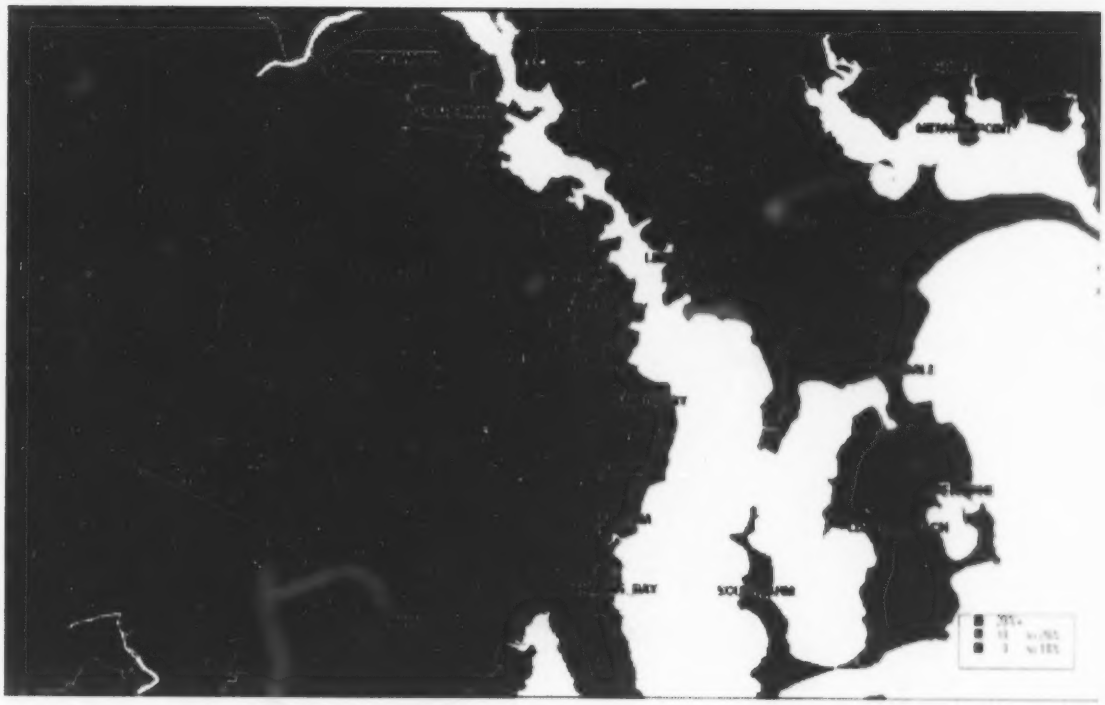
Tasmania



Hobart



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Western Australia

Perth

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E DETYA unit record dataset on AUSTUDY recipients: variable descriptions

Variable descriptions

Variable	Comments
Extract year	System generated unique identifier
ID number	
Scheme of study	Secondary
	Tertiary including TAFE sector
Age	As at 1 January
Gender	Male
	Female
Marital status	Unmarried
	Married
	De facto
	Widowed/divorced/separated
Home State	
Home postcode	
Eligibility status	Eligible at some time during the year
	Ineligible
	Awaiting assessment
	Withdrawn application
Entitlement	Includes all allowances: Living Allowance, Pensioner Education Supplement, Rent Assistance, incidentals, fares, etc.
Family assets	Reported family assets – applicable only to dependent or married applicants
Family income	Reported parental or spouse net taxable income – does not include the applicants personal income
Student income	Reported applicant's personal income
Institution	School
	TAFE
	University
	Private provider
Family relationship	Married
	Dependent
	Single
Number of children	Either siblings or dependants
Number of parents	
Internal flag	

(Continued on next page)

Variable descriptions (continued)

Variable	Comments
Mother's occupation	Wage or salary earner
	Self-employed
	Primary producer – this was included with the self-employed for the majority of the period
	Pensioner or retired
	Unemployed
	Home duties, student or other
	Not coded or required
Father's occupation	As for mother's
Spouse's occupation	As for mother's
Eligibility reason	Married – independent
	De facto – independent
	25 years or over – independent
	Sole parent – independent
	Orphan – independent
	Ward (preserved) – independent
	Refugee – independent
	Workforce – independent
	Homeless – independent
	Special rate – 21 or over and long term unemployed or migrant in an English as a second language course – independent
	Previously had dependent child – Independent
	Special rate – married student 21 or over with dependent child, or dependent spouse, or long term unemployed – independent
	Age 22–24 years – living at home – independent
	Preserved rate – 22–24 years – living at home – independent
	Away from home – time/distance – dependent
	Away from home – mandatory residence – dependent
	Away from home – difficult home circumstances – dependent
	Away from home – isolated student – dependent
	Foster – without allowance – independent
	Away from home – 21 or over and unemployed 6 months, or migrant in an English as a second language course – dependent
	Standard at home rate – dependent
	Foster with allowance – independent
	At home – 21 or over and unemployed 6 months, or migrant in an English as a second language course – dependent
	Independent – with Dependent Spouse Allowance
	Pensioner in full-time study – Pensioner Education Supplement
	Pensioner in part-time study – Pensioner Education Supplement

Source: Compiled from information provided by DETYA.

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